FEDERAL SCIENCE EXPENDITURES AND PERSONNEL

1982/83

MARCH 1982

Ministry of State

Science and Technology
Canada

Federal science expenditures and personnel
1982/1983

(Report — Ministry of State for Science and Technology
ISSN 0701-8142)

Text in English

1. Federal aid to research—Canada—Statistics

2. Research—Canada—Finance—Statistics. I. Canada
Ministry of State for Science and Technology

Q180.C3G88 507.2071

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Cat. No. ST 21-4/1983E

ISBN 0-662-11932-0

PREFACE

Each Spring the government tables its Main Estimates in the House of Commons for the new fiscal year commencing April 1st. The Main Estimates give an overview of the broad spending programs of departments and agencies. Scientific expenditures are provided for, but may not be separately displayed in published departmental estimates. This statistical publication fills that gap.

To assist readers to obtain an overall appreciation of federal scientific expenditures, this report presents science statistics assembled during the complicated process which recently culminated in the tabling of Main Estimates 1982/1983. The government's support of science provided through other means, e.g. through tax incentives, is not included in these statistics.

Many people from many departments and agencies contributed in the preparation of this report, and in particular, the Financial Officers of departments, on whom fell the onus for providing details of both the historical and the planned science expenditures which this report lists. The Treasury Board Secretariat made it possible for these statistics to be obtained in conjunction with the budgetary machinery, by incorporating as addenda to the Main Estimates submissions the collection of federal science statistics conducted jointly by Statistics Canada and MOSST.

The staff of the Science Statistics Centre, a Statistics Canada satellite office located with MOSST, is owed special thanks. The Centre worked closely with MOSST and with departmental contacts to ensure that the resulting data base would be accurate, consistent and timely. The important contribution of the Interdepartmental Committee on Scientific Expenditures to the process of improving definitions and the accuracy of reporting is also acknowledged.

Finally, thanks are due to the Research and Information Services Division of MOSST, whose programming work made possible both the attractive appearance and the convenient reproduction of the tables presented in this statistical report.

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TABLES OF SCIENTIFIC EXPENDITURES AND RESOURCES
(Table numbers in parentheses)

SUBJECT	SUBDIVISIONS	Fields of Science N&H	N	H
S&T Totals				
	summary:			
	- all departments and agencies	12 (1)	-	-
	- performing sector	14 (2)	46 (21)	78 (40)
	- type of science activity	15 (3)	47 (22)	79 (41)
	by department/agency:			
	- intramural/extramural	18 (5)	50 (24)	82 (43)
	- R&D and RSA	16 (4)	48 (23)	80 (42)
	- intramural	20 (6)	52 (25)	84 (44)
	- industry	22 (7)	54 (26)	86 (45)
	- university	23 (8)	55 (27)	87 (46)
	- non profit institutions	24 (9)	56 (28)	88 (47)
	- provincial & municipal governments	25 (10)	57 (29)	89 (48)
	- foreign	26 (11)	58 (30)	90 (49)
	- other	27 (12)	59 (31)	91 (50)
R&D Totals				
	summary:			
	- performing sector	28 (13)	60 (32)	92 (51)
	by department/agency:			
	- intramural/extramural	30 (15)	62 (34)	94 (53)

SUBJECT	SUBDIVISIONS	Fields of Science N&H	N	H
	- industry: grants and contracts	32 (16)	64 (35)	96 (54)
	- university and non-profit institutions: grants and contracts	34 (17)	66 (36)	98 (55)
RSA Totals				
	summary:			
	- by performing sector	29 (14)	61 (33)	93 (52)
	by department/agency:			
	- intramural/extramural	36 (18)	68 (37)	100 (56)
S&T personnel				
	summary:			
	- type of science activity	44 (20)	76 (39)	108 (58)
	by department/agency:			
	- by personnel category	38 (19)	70 (38)	102 (57)
Expenditures by Cabinet Committee				
	summary:			
	- R&D and RSA	111 (59)	-	-
	- performing sector	114 (61)	-	-
	by department/agency:			
	- all S&T	112 (60)	-	-
	- R&D and RSA	118 (62)	120 (63)	126 (65)
	S&T personnel:			
	- by science activity	-	122 (64)	128 (66)

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NOTES FOR READERS

The data in this publication are based on program budgetary expenditures presented to Parliament for approval in the 1982/83 Main Estimates. The tables display both the expenditures and the personnel resources applied to activities in the natural and human sciences. This report is a statistical companion publication to MOSST's more descriptive report Federal Science Activities 1982/83. As the data are designed primarily for use by those with some knowledge of the government's scientific activities, a minimum of explanatory material accompanies the statistics.

This report is organized into four main sections and an appendix. The first section presents combined data on the natural and human sciences, the second data on the natural sciences alone and the third data on the human sciences alone. The fourth section presents expenditure data corresponding with the cabinet policy and expenditure committees within which the various departments and agencies are grouped. The appendix contains definitions of terms used in the categorization of science expenditures, and some notes on limitations of the data surveys. Readers are urged to read this appendix before drawing their own conclusions from the data.

The data used for this publication are derived from the 1982/83 Main Estimates survey of expenditures and personnel resources in the natural and human sciences, which covers the fiscal years 1980/81, 1981/82 and 1982/83. The data, therefore, include the actual expenditures recorded in the base year 1980/81, those forecast for the current year 1981/82 and those for which funding authority is requested in estimates for the new fiscal year, 1982/83.

Personnel categories are measured in full-time equivalents, that is, the number of person-years cumulatively devoted to scientific activities by the employees engaged in these activities, whether on a continuing, term, casual or seasonal basis. The 1980/81 data are the actual totals of the person years used in that period, while the 1981/82 data are calculated from the actual person-years up to September 30, 1981, combined with the totals forecast and authorized until March 31, 1981. The 1982/83 data reflect the authorized person year totals indicated in the Main Estimates.

Users of this report may wish to note that "non-program" costs are not included in the expenditure data in this report. (See the appendix for an explanation of this exclusion). Data which do include "non-program" costs are published in the Statistics

Canada publication, The Annual Review of Science Statistics (Cat. No. 13-212), and in issues of the Service Bulletin (Cat. No. 13-003).

Additional sub-divisions or rearrangements of the data totals presented in this report are often available on request to the Program Review and Assessment Division of MOSST.

Data for federal departments, agencies and programs appear in the tables in the order in which they appear in the Main Estimates for 1982/83. The various federal agencies are listed under the portfolios of the Ministers through whom they report to Parliament -- for example, Statistics Canada appears under the Supply and Services portfolio. Program expenditures are listed in the tables and summed to show departmental totals, but non-departmental agencies are not included in departmental totals. For example, the amount shown opposite the Department of Agriculture (AGR) is the sum of the corresponding amounts opposite the four programs commencing with AGR- (AGR-ADM, AGR-DEV, etc), but expenditures under the Canadian Dairy Commission (CDC) and the Canadian Livestock Feed Board (CLFB) are <u>not</u> included in the departmental (AGR) total.

The departmental and program abbreviations used are explained in the following pages.

AGRICULTURE	
AGR	Department
AGR-ADM	Administration
AGR-DEV	Agri-Food Development Program
AGR-RI	Agri-Food Regulation and Inspection
AGR-CGC	Canadian Grain Commission
CDC	Canadian Dairy Commission
CLFB	Canadian Livestock Feed Board
COMMUNICATIONS	
COMM	Department
COMM-COMM	Communications
COMM-AC	Arts and Culture
CBC	Canadian Broadcasting Corporation
CRTC	Canadian Radio-Television and Telecommunications Commission
NFB	National Film Board
NLIB	National Library
NMUS	National Museums of Canada
PA	Public Archives
SSHRC	Social Sciences and Humanities Research Council
CONSUMER AND CORPORATE AFFAIRS	
CCA	Department
CCA-ADM	Administration
CCA-CON	Consumer Affairs
CCA-COR	Bureau of Corporate Affairs (incl. Intellectual Property)
CCA-CICP	Combines Investigation and Competition Policy
ECONOMIC DEVELOPMENT	
ED	Ministry of State
EMPLOYMENT & IMMIGRATION	
EI	Department
EI-ADM	Administration
CEIC	Canada Employment and Immigration Commission
ENERGY MINES AND RESOURCES	
EMR	Department
EMR-ENER	Energy
EMR-MES	Minerals and Earth Sciences
AECB	Atomic Energy Control Board
AECL	Atomic Energy of Canada Ltd.
NEB	National Energy Board
ENVIRONMENT	
ENV	Department
ENV-AD	Administration
ENV-ES	Environmental Services
ENV-EPS	Environmental Protection Services
ENV-AES	Atmospheric Environment Services
ENV-ECS	Environmental Conservation Services
ENV-FOR	Canadian Forestry Service
ENV-PC	Parks Canada

EXTERNAL AFFAIRS	
EA	Department
EA-CIA	Canadian Interests Abroad
CIDA	Candian International Development Agency
IDRC	International Development Research Centre
IJC	International Joint Commission
FINANCE	
FIN	Department
FIN-FEP	Financial and Economic Policies
FISHERIES AND OCEANS	
F&O	Department
F&O-FM	Fisheries and Marine Service
INDIAN AFFAIRS & NORTHERN DEVELOPMENT	
IAND	Department
IAND-IIA	Indian and Inuit Affairs
IAND-NA	Northern Affairs
INDUSTRY TRADE AND COMMERCE	
ITC	Department
ITC-TI	Trade-Industrial
ITC-TOUR	Tourism
ITC-GO	Grains and Oilseeds
JUSTICE	
JUST	Department
JUST-ADM	Administration
JUST-CUIO	Canadian Unity Information Office
CHRC	Canadian Human Rights Commission
LRC	Law Reform Commission
LABOUR	
LAB	Department
NATIONAL DEFENCE	
NDEF	Department
NDEF-SER	Defence Services
NATIONAL HEALTH AND WELFARE	
NHW	Department
NHW-ADM	Administration
NHW-HSS	Health and Social Services
NHW-MS	Medical Services
NHW-HP	Health Protection
NHW-IS	Income Security
MRC	Medical Research Council

NATIONAL REVENUE	
NREV	Department
NREV-TAX	Taxation
PRIVY COUNCIL	
PC	Privy Council
COL	Commissioner of Official Languages
ECC	Economic Council of Canada
PUBLIC WORKS	
PW	Department
PW-PTS	Professional and Technical Services
CMHC	Canada Mortgage and Housing Corporation
NCC	National Capital Commission
REGIONAL ECONOMIC EXPANSION	
REE	Department
SCIENCE AND TECHNOLOGY	
ST	Ministry of State
NRC	National Research Council
NRC-SIR	Scientific and Industrial Research
NRC-STI	Scientific and Technical Information
NSERC	Natural Sciences and Engineering Research Council
SC	Science Council of Canada
SECRETARY OF STATE	
SECS	Department
SECS-OL	Official Languages
SECS-ES	Education Support
SECS-TRA	Translation
SECS-CIT	Citizenship
PSC	Public Service Commission
SOLICITOR GENERAL	
SGEN	Department
SGEN-ADM	Administration
RCMP	Royal Canadian Mounted Police
SUPPLY AND SERVICES	
SS	Department
SS-SUPP	Supply
STCAN	Department
TRANSPORT	
TPT	Department
TPT-ADM	Administration
TPT-MAR	Marine
TPT-AIR	Air
TPT-SUR	Surface
CTC	Canadian Transport Commission
TREASURY BOARD	
TB	Department
TB-ADM	Administration

1

Natural and Human Sciences

TABLE 1

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	NATURAL	HUMAN	TOTAL	NATURAL	HUMAN	TOTAL	NATURAL	HUMAN	TOTAL
AGRICULTURE									
AGR	151,119	1,250	152,369	166,784	1,738	168,522	194,281	1,788	196,069
AGR-ADM	4,200	---	4,200	4,783	---	4,783	5,084	---	5,084
AGR-DEV	139,446	1,250	140,696	153,383	1,738	155,121	177,026	1,788	178,814
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	2,883	---	2,883	3,515	---	3,515	4,190	---	4,190
CDC	598	---	598	2,200	---	2,200	2,500	---	2,500
CLFB	---	89	89	---	92	92	---	145	145
COMMUNICATIONS									
COMM	60,571	5,408	65,979	76,139	6,144	82,283	61,430	6,111	67,541
COMM-COMM	60,571	4,751	65,322	76,139	5,161	81,300	61,430	5,296	66,726
COMM-AC	---	657	657	---	983	983	---	815	815
CBC	---	3,636	3,636	---	4,042	4,042	---	4,607	4,607
CRTC	---	602	602	---	679	679	---	819	819
NFB	634	---	634	603	---	603	697	---	697
NLIB	---	17,245	17,245	---	21,609	21,609	---	25,842	25,842
NMUS	18,811	35,204	54,015	21,012	37,643	58,655	22,307	39,486	61,793
PA	---	10,817	10,817	---	11,960	11,960	---	13,689	13,689
SSHRC	---	42,378	42,378	---	46,601	46,601	---	56,676	56,676
CONSUMER AND CORPORATE AFFAIRS									
CCA	14,545	2,879	17,424	14,972	4,146	19,118	17,731	5,444	23,175
CCA-ADM	---	---	---	---	3,032	3,032	---	3,855	3,855
CCA-CON	2,170	1,411	3,581	2,435	---	2,435	2,850	---	2,850
CCA-COR	12,375	788	13,163	12,537	---	12,537	14,881	---	14,881
CCA-CICP	---	680	680	---	1,114	1,114	---	1,589	1,589
ECONOMIC DEVELOPMENT									
ED	---	1,677	1,677	---	2,038	2,038	---	2,493	2,493
EMPLOYMENT & IMMIGRATION									
EI	---	9,529	9,529	---	9,602	9,602	---	10,180	10,180
EI-ADM	---	9,529	9,529	---	9,602	9,602	---	10,180	10,180
CEIC	---	7,758	7,758	---	9,255	9,255	---	8,126	8,126
ENERGY MINES & RESOURCES									
EMR	170,637	8,422	179,059	219,242	10,457	229,699	268,835	11,645	280,480
EMR-ENER	46,428	2,100	48,528	67,992	2,350	70,342	78,902	2,690	81,592
EMR-MES	124,209	6,322	130,531	151,250	8,107	159,357	189,933	8,955	198,888
AECB	775	---	775	1,099	---	1,099	2,071	---	2,071
AECL	96,772	---	96,772	114,182	---	114,182	132,384	---	132,384
NEB	382	1,307	1,689	495	1,681	2,176	501	1,689	2,190
ENVIRONMENT									
ENV	231,651	15,499	247,150	262,018	17,000	279,018	314,684	19,419	334,103
ENV-ADM	1,579	261	1,840	1,621	308	1,929	1,682	438	2,120
ENV-ES	228,506	4,192	232,698	258,674	4,542	263,216	311,083	5,471	316,554
ENV-EPS	8,760	---	8,760	8,170	---	8,170	10,000	---	10,000
ENV-AES	115,833	---	115,833	134,107	---	134,107	164,750	---	164,750
ENV-ECS	53,633	4,192	57,825	58,104	4,542	62,646	66,971	5,471	72,442
ENV-FOR	50,280	---	50,280	58,293	---	58,293	69,362	---	69,362
ENV-PC	1,566	11,046	12,612	1,723	12,150	13,873	1,919	13,510	15,429
EXTERNAL AFFAIRS									
EA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
EA-CIA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
CIDA	32,234	4,257	36,491	35,739	4,636	40,375	39,694	5,280	44,974
IDRC	20,110	19,688	39,798	24,439	21,600	46,039	29,896	26,730	56,626
IJC	2,328	---	2,328	2,771	---	2,771	2,988	---	2,988
FINANCE									
FIN	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FIN-FEP	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FISHERIES AND OCEANS									
F&O	112,903	3,500	116,403	126,541	3,430	129,971	142,001	3,792	145,793
F&O-FM	112,903	3,500	116,403	126,541	3,430	129,971	142,001	3,792	145,793
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	3,020	1,937	4,957	3,368	3,054	6,422	3,673	3,225	6,898
IAND-IIA	---	---	---	---	380	380	---	395	395
IAND-NA	3,020	1,937	4,957	3,368	2,674	6,042	3,673	2,830	6,503
INDUSTRY TRADE AND COMMERCE									
ITC	95,928	1,562	97,490	140,611	2,935	143,546	170,575	2,739	173,314
ITC-TI	94,700	1,217	95,917	139,473	2,556	142,029	169,515	2,360	171,875
ITC-TOUR	---	345	345	---	379	379	---	379	379
ITC-GO	1,228	---	1,228	1,138	---	1,138	1,060	---	1,060

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	NATURAL	HUMAN	TOTAL	NATURAL	HUMAN	TOTAL	NATURAL	HUMAN	TOTAL
JUSTICE									
JUST	---	4,281	4,281	---	6,012	6,012	---	8,114	8,114
JUST-ADM	---	2,729	2,729	---	3,912	3,912	---	6,014	6,014
JUST-CUIO	---	1,552	1,552	---	2,100	2,100	---	2,100	2,100
CHRC	---	304	304	---	288	288	---	325	325
LRC	---	1,466	1,466	---	2,349	2,349	---	2,938	2,938
LABOUR									
LAB	---	3,813	3,813	---	4,191	4,191	---	4,724	4,724
NATIONAL DEFENCE									
NDEF	100,534	2,037	102,571	109,693	2,333	112,026	136,995	2,575	139,570
NDEF-SER	100,534	2,037	102,571	109,693	2,333	112,026	136,995	2,575	139,570
NATIONAL HEALTH AND WELFARE									
NHW	48,747	15,065	63,812	53,929	18,685	72,614	60,184	20,727	80,911
NHW-ADM	---	5,974	5,974	---	8,061	8,061	---	8,999	8,999
NHW-HSS	8,696	8,560	17,256	8,731	10,012	18,743	7,755	10,811	18,566
NHW-MS	2,086	---	2,086	3,918	---	3,918	2,167	---	2,167
NHW-HP	37,965	---	37,965	41,280	---	41,280	50,262	---	50,262
NHW-IS	---	531	531	---	612	612	---	917	917
MRC	82,031	---	82,031	100,167	---	100,167	112,884	---	112,884
NATIONAL REVENUE									
NREV	---	4,486	4,486	---	10,718	10,718	---	6,986	6,986
NREV-TAX	---	4,486	4,486	---	10,718	10,718	---	6,986	6,986
PRIVY COUNCIL									
PC	---	549	549	---	589	589	---	89	89
COL	---	975	975	---	1,172	1,172	---	3,097	3,097
ECC	---	8,030	8,030	---	7,392	7,392	---	7,814	7,814
PUBLIC WORKS									
PW	8,310	---	8,310	7,657	---	7,657	8,138	---	8,138
PW-PTS	8,310	---	8,310	7,657	---	7,657	8,138	---	8,138
CMHC	3,126	9,454	12,580	4,784	11,031	15,815	5,215	11,671	16,886
NCC	160	92	252	250	337	587	425	209	634
REGIONAL ECONOMIC EXPANSION									
REE	771	1,712	2,483	957	2,330	3,287	5,588	2,697	8,285
SCIENCE AND TECHNOLOGY									
ST	1,358	7,004	8,362	1,553	8,035	9,588	1,895	8,917	10,812
NRC	226,102	---	226,102	297,374	---	297,374	360,692	---	360,692
NRC-SIR	211,444	---	211,444	278,784	---	278,784	339,027	---	339,027
NRC-STI	14,658	---	14,658	18,590	---	18,590	21,665	---	21,665
NSERC	162,871	---	162,871	201,803	---	201,803	227,081	---	227,081
SC	---	2,890	2,890	---	3,542	3,542	---	4,047	4,047
SECRETARY OF STATE									
SECS	---	9,073	9,073	---	10,017	10,017	---	10,941	10,941
SECS-OL	---	853	853	---	816	816	---	1,031	1,031
SECS-ES	---	139	139	---	415	415	---	895	895
SECS-TRA	---	5,121	5,121	---	5,681	5,681	---	5,335	5,335
SECS-CIT	---	2,960	2,960	---	3,105	3,105	---	3,680	3,680
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	---	4,175	4,175	---	5,669	5,669	---	5,169	5,169
SGEN-ADM	---	4,175	4,175	---	5,669	5,669	---	5,169	5,169
RCMP	71	---	71	295	---	295	300	---	300
SUPPLY AND SERVICES									
SS	14,391	562	14,953	14,561	556	15,117	14,574	554	15,128
SS-SUPP	14,391	562	14,953	14,561	556	15,117	14,574	554	15,128
STCAN	---	144,134	144,134	---	229,965	229,965	---	187,219	187,219
TRANSPORT									
TPT	16,117	1,034	17,151	20,063	1,300	21,363	22,281	1,669	23,950
TPT-ADM	5,153	933	6,086	8,233	1,180	9,413	9,120	1,504	10,624
TPT-MAR	8,513	---	8,513	8,927	---	8,927	9,911	---	9,911
TPT-AIR	2,407	---	2,407	2,843	---	2,843	3,164	---	3,164
TPT-SUR	44	101	145	60	120	180	86	163	251
CTC	---	2,758	2,758	---	2,715	2,715	---	3,255	3,255
TREASURY BOARD									
TB	---	10,666	10,666	---	12,927	12,927	---	15,444	15,444
TB-ADM	---	10,666	10,666	---	12,927	12,927	---	15,444	15,444
TOTAL	1,677,607	443,647	2,121,254	2,025,301	579,222	2,604,523	2,362,500	578,939	2,941,439

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	1,350,983	(63.7)	1,618,404	(62.1)	1,808,661	(61.5)
INDUSTRY	306,099	(14.4)	417,057	(16.0)	482,944	(16.4)
UNIVERSITIES	319,956	(15.1)	390,345	(15.0)	441,165	(15.0)
NON-PROFIT INSTITUTIONS	22,547	(1.1)	26,984	(1.0)	31,157	(1.1)
PROVINCIAL & MUNICIPAL	46,559	(2.2)	62,663	(2.4)	79,973	(2.7)
FOREIGN	57,471	(2.7)	67,493	(2.6)	75,067	(2.6)
OTHER CANADIAN	17,639	(0.8)	21,577	(0.8)	22,472	(0.8)
TOTAL	2,121,254	(100.0)	2,604,523	(100.0)	2,941,439	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES
TOTAL ALL COMPONENTS

FISCAL YEAR 1980-81

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	556.782	0	0	0	0	0	0	556.782
R&D CONTRACTS	1.784	182.944	17.829	4.918	640	4.300	5.958	138.445
SUPPORTING CONTRACTS	24.694	0	0	0	0	0	0	24.694
R&D GRANTS	0	135.885	255.632	9.662	33.218	39.402	1.827	474.818
RESEARCH FELLOWSHIPS	1.243	1.639	11.126	0	0	5.359	319	19.686
ADMIN. EXTRAMURAL R&D	32.421	0	0	0	0	0	0	32.421
CAPITAL - R&D	88.246	0	0	0	0	0	0	88.246
SUB TOTAL R&D	705.170	240.468	284.587	14.572	33.858	49.141	7.384	1.335.092
DATA COLLECTION	319.275	15.787	2.410	1.175	5.218	60	2.819	346.744
INFORMATION SERVICES	128.064	2.445	3.147	4.257	1.604	1.643	2.234	143.394
ECONOMIC & FEAS. STUDIES	28.771	1.734	312	331	0	782	438	32.288
OPERN'S & POLICY STUDIES	50.924	3.220	323	576	0	39	1.206	56.288
TESTING & STANDARDIZATION	27.815	1.576	820	277	0	118	148	30.746
FEASIBILITY STUDIES	2.817	39.838	271	278	0	86	1	43.291
EDUCATION SUPPORT	665	420	27.185	20	0	5.690	2.287	36.267
MUSEUM SERVICES	41.820	611	901	1.061	5.887	0	1.202	51.482
ADMIN. EXTRAMURAL RSA	11.470	0	0	0	0	0	0	11.470
CAPITAL - RSA	34.192	0	0	0	0	0	0	34.192
SUB TOTAL RSA	645.813	65.631	35.369	7.975	12.709	8.338	10.335	786.162
TOTAL	1.350.983	306.099	319.956	22.547	46.959	57.471	17.639	2.121.254

FISCAL YEAR 1981-82

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	644.557	0	0	0	0	0	0	644.557
R&D CONTRACTS	1.503	142.981	23.392	5.646	1.784	4.528	8.108	187.862
SUPPORTING CONTRACTS	28.650	0	0	0	0	0	0	28.650
R&D GRANTS	0	196.897	307.990	12.262	46.657	47.858	3.691	613.747
RESEARCH FELLOWSHIPS	1.597	2.839	15.896	0	0	5.786	265	26.383
ADMIN. EXTRAMURAL R&D	38.094	0	0	0	0	0	0	38.094
CAPITAL - R&D	104.044	0	0	0	0	0	0	104.044
SUB TOTAL R&D	818.445	341.917	347.278	17.908	48.361	57.364	12.064	1.643.337
DATA COLLECTION	427.748	18.172	2.761	1.141	5.471	58	4.024	459.359
INFORMATION SERVICES	148.285	3.685	3.454	4.533	2.641	2.361	1.391	166.190
ECONOMIC & FEAS. STUDIES	39.683	1.877	277	1.200	17	742	483	44.199
OPERN'S & POLICY STUDIES	63.331	3.396	594	418	0	23	533	68.287
TESTING & STANDARDIZATION	30.116	3.179	1.594	384	1	115	180	35.569
FEASIBILITY STUDIES	2.944	43.488	152	311	91	157	62	47.205
EDUCATION SUPPORT	724	790	33.307	0	8	6.601	1.686	43.116
MUSEUM SERVICES	43.848	633	928	1.097	6.873	0	1.234	53.805
ADMIN. EXTRAMURAL RSA	13.670	0	0	0	0	0	0	13.670
CAPITAL - RSA	29.786	0	0	0	0	0	0	29.786
SUB TOTAL RSA	799.959	75.148	43.067	9.076	14.382	10.129	9.513	961.106
TOTAL	1.618.404	417.057	390.345	26.984	62.663	67.493	21.577	2.604.523

FISCAL YEAR 1982-83

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	725.047	0	0	0	0	0	0	725.047
R&D CONTRACTS	1.998	171.886	27.897	7.231	4.862	4.275	9.732	226.273
SUPPORTING CONTRACTS	28.582	0	0	0	0	0	0	28.582
R&D GRANTS	0	218.530	347.266	14.217	55.946	53.818	3.339	692.388
RESEARCH FELLOWSHIPS	1.746	3.945	19.214	0	0	6.514	322	31.741
ADMIN. EXTRAMURAL R&D	48.884	0	0	0	0	0	0	48.884
CAPITAL - R&D	161.947	0	0	0	0	0	0	161.947
SUB TOTAL R&D	968.116	394.361	393.577	21.448	60.808	63.799	13.393	1.914.782
DATA COLLECTION	410.213	22.634	2.882	1.138	5.876	54	3.861	446.578
INFORMATION SERVICES	171.102	4.432	4.136	4.832	7.341	2.664	1.627	196.134
ECONOMIC & FEAS. STUDIES	44.228	2.148	199	1.346	3	850	490	49.264
OPERN'S & POLICY STUDIES	71.214	3.978	564	498	0	0	738	76.984
TESTING & STANDARDIZATION	33.414	3.620	1.816	375	1	0	270	39.496
FEASIBILITY STUDIES	3.247	50.184	194	338	143	196	74	54.288
EDUCATION SUPPORT	815	979	36.874	8	0	7.496	786	46.958
MUSEUM SERVICES	44.984	696	1.803	1.198	6.681	0	1.233	55.715
ADMIN. EXTRAMURAL RSA	16.273	0	0	0	0	0	0	16.273
CAPITAL - RSA	45.055	0	0	0	0	0	0	45.055
SUB TOTAL RSA	840.545	88.583	47.588	9.709	19.965	11.260	9.079	1.026.737
TOTAL	1.808.661	482.944	441.165	31.157	79.973	75.067	22.472	2.941.439

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	142,902	9,467	152,369	158,460	10,062	168,522	186,053	10,016	196,069
AGR-ADM	---	4,200	4,200	---	4,783	4,783	---	5,084	5,084
AGR-DEV	136,962	3,734	140,696	151,704	3,417	155,121	176,155	2,659	178,814
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	1,350	1,533	2,883	1,653	1,862	3,515	1,917	2,273	4,190
CDC	---	598	598	---	2,200	2,200	---	2,500	2,500
CLFB	71	18	89	71	21	92	117	28	145
COMMUNICATIONS									
COMM	60,694	5,285	65,979	76,783	5,500	82,283	61,890	5,651	67,541
COMM-COMM	60,694	4,628	65,322	76,783	4,517	81,300	61,890	4,836	66,726
COMM-AC	---	657	657	---	983	983	---	815	815
CBC	---	3,636	3,636	---	4,042	4,042	---	4,607	4,607
CRTC	602	---	602	679	---	679	819	---	819
NFB	382	252	634	427	176	603	497	200	697
NLIB	---	17,245	17,245	---	21,609	21,609	---	25,842	25,842
NMUS	2,891	51,124	54,015	5,759	52,896	58,655	6,417	55,376	61,793
PA	---	10,817	10,817	---	11,960	11,960	---	13,689	13,689
SSHRC	25,568	16,810	42,378	27,874	18,727	46,601	35,726	20,950	56,676
CONSUMER AND CORPORATE AFFAIRS									
CCA	2,662	14,762	17,424	3,623	15,495	19,118	4,637	18,538	23,175
CCA-ADM	---	---	---	3,032	---	3,032	3,855	---	3,855
CCA-CON	1,411	2,170	3,581	---	2,435	2,435	---	2,850	2,850
CCA-COR	788	12,375	13,163	---	12,537	12,537	---	14,881	14,881
CCA-CICP	463	217	680	591	523	1,114	782	807	1,589
ECONOMIC DEVELOPMENT									
ED	---	1,677	1,677	---	2,038	2,038	---	2,493	2,493
EMPLOYMENT & IMMIGRATION									
EI	1,528	8,001	9,529	1,477	8,125	9,602	1,568	8,612	10,180
EI-ADM	1,528	8,001	9,529	1,477	8,125	9,602	1,568	8,612	10,180
CEIC	---	7,758	7,758	---	9,255	9,255	---	8,126	8,126
ENERGY MINES & RESOURCES									
EMR	130,045	49,014	179,059	174,237	55,462	229,699	214,472	66,008	280,480
EMR-ENER	45,851	2,677	48,528	65,751	4,591	70,342	75,159	6,433	81,592
EMR-MES	84,194	46,337	130,531	108,486	50,871	159,357	139,313	59,575	198,888
AECB	775	---	775	1,099	---	1,099	2,071	---	2,071
AECL	78,848	17,924	96,772	96,202	17,980	114,182	110,505	21,879	132,384
NEB	---	1,689	1,689	---	2,176	2,176	---	2,190	2,190
ENVIRONMENT									
ENV	88,176	158,974	247,150	101,403	177,615	279,018	120,668	213,435	334,103
ENV-ADM	399	1,441	1,840	432	1,497	1,929	475	1,645	2,120
ENV-ES	87,311	145,387	232,698	100,460	162,756	263,216	119,622	196,932	316,554
ENV-EPS	5,388	3,372	8,760	5,348	2,822	8,170	7,108	2,892	10,000
ENV-AES	18,860	96,973	115,833	22,627	111,480	134,107	26,807	137,943	164,750
ENV-ECS	17,533	40,292	57,825	19,035	43,611	62,646	21,888	50,554	72,442
ENV-FOR	45,530	4,750	50,280	53,450	4,843	58,293	63,819	5,543	69,362
ENV-PC	466	12,146	12,612	511	13,362	13,873	571	14,858	15,429
EXTERNAL AFFAIRS									
EA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
EA-CIA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
CIDA	10,044	26,447	36,491	11,315	29,060	40,375	12,846	32,128	44,974
IDRC	33,170	6,628	39,798	37,837	8,202	46,039	46,584	10,042	56,626
IJC	---	2,328	2,328	---	2,771	2,771	---	2,988	2,988
FINANCE									
FIN	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FIN-FEP	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FISHERIES AND OCEANS									
F&O	57,509	58,894	116,403	64,011	65,960	129,971	64,913	80,880	145,793
F&O-FM	57,509	58,894	116,403	64,011	65,960	129,971	64,913	80,880	145,793
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	3,423	1,534	4,957	3,748	2,674	6,422	4,158	2,740	6,898
IAND-IIA	---	---	---	2	378	380	13	382	395
IAND-NA	3,423	1,534	4,957	3,746	2,296	6,042	4,145	2,358	6,503
INDUSTRY TRADE AND COMMERCE									
ITC	94,189	3,301	97,490	139,343	4,203	143,546	168,628	4,686	173,314
ITC-TI	92,714	3,203	95,917	137,934	4,095	142,029	167,297	4,578	171,875
ITC-TOUR	247	98	345	271	108	379	271	108	379
ITC-GO	1,228	---	1,228	1,138	---	1,138	1,060	---	1,060

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
JUSTICE									
JUST	1,950	2,331	4,281	3,022	2,990	6,012	4,852	3,262	8,114
JUST-ADM	1,950	779	2,729	3,022	890	3,912	4,852	1,162	6,014
JUST-CUIO	---	1,552	1,552	---	2,100	2,100	---	2,100	2,100
CHRC	---	304	304	---	288	288	---	325	325
LRC	913	553	1,466	1,467	882	2,349	1,750	1,188	2,938
LABOUR									
LAB	603	3,210	3,813	662	3,529	4,191	745	3,979	4,724
NATIONAL DEFENCE									
NDEF	100,493	2,078	102,571	109,624	2,402	112,026	136,923	2,647	139,570
NDEF-SER	100,493	2,078	102,571	109,624	2,402	112,026	136,923	2,647	139,570
NATIONAL HEALTH AND WELFARE									
NHW	27,568	36,244	63,812	31,804	40,810	72,614	32,575	48,336	80,911
NHW-ADM	1,677	4,297	5,974	2,161	5,900	8,061	2,522	6,477	8,999
NHW-HSS	12,576	4,680	17,256	13,308	5,435	18,743	12,495	6,071	18,566
NHW-MS	2,086	---	2,086	3,918	---	3,918	2,167	---	2,167
NHW-HP	11,229	26,736	37,965	12,417	28,863	41,280	15,391	34,871	50,262
NHW-IS	---	531	531	---	612	612	---	917	917
MRC	79,461	2,570	82,031	96,849	3,318	100,167	109,146	3,738	112,884
NATIONAL REVENUE									
NREV	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
NREV-TAX	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
PRIVY COUNCIL									
PC	549	---	549	589	---	589	89	---	89
COL	---	975	975	---	1,172	1,172	---	3,097	3,097
ECC	7,019	1,011	8,030	6,440	952	7,392	6,814	1,000	7,814
PUBLIC WORKS									
PW	4,260	4,050	8,310	1,408	6,249	7,657	2,380	5,758	8,138
PW-PTS	4,260	4,050	8,310	1,408	6,249	7,657	2,380	5,758	8,138
CMHC	4,573	8,007	12,580	6,047	9,768	15,815	6,495	10,391	16,886
NCC	10	242	252	16	571	587	10	624	634
REGIONAL ECONOMIC EXPANSION									
REE	872	1,611	2,483	1,071	2,216	3,287	1,258	7,027	8,285
SCIENCE AND TECHNOLOGY									
ST	1,358	7,004	8,362	1,553	8,035	9,588	1,895	8,917	10,812
NRC	189,977	36,125	226,102	254,997	42,377	297,374	312,448	48,244	360,692
NRC-SIR	189,977	21,467	211,444	254,997	23,787	278,784	312,448	26,579	339,027
NRC-STI	---	14,658	14,658	---	18,590	18,590	---	21,665	21,665
NSERC	146,238	16,633	162,871	180,023	21,780	201,803	202,484	24,597	227,081
SC	1,498	1,392	2,890	1,912	1,630	3,542	2,201	1,846	4,047
SECRETARY OF STATE									
SECS	5,845	3,228	9,073	5,992	4,025	10,017	6,415	4,526	10,941
SECS-OL	488	373	853	509	307	816	724	307	1,031
SECS-ES	---	139	139	---	415	415	---	895	895
SECS-TRA	2,868	2,253	5,121	3,200	2,481	5,681	3,108	2,227	5,335
SECS-CIT	2,497	463	2,960	2,283	822	3,105	2,583	1,097	3,680
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	2,415	1,760	4,175	3,013	2,656	5,669	3,013	2,156	5,169
SGEN-ADM	2,415	1,760	4,175	3,013	2,656	5,669	3,013	2,156	5,169
RCMP	71	---	71	295	---	295	300	---	300
SUPPLY AND SERVICES									
SS	12,383	2,570	14,953	12,574	2,543	15,117	12,583	2,545	15,128
SS-SUPP	12,383	2,570	14,953	12,574	2,543	15,117	12,583	2,545	15,128
STCAN	5,828	138,306	44,134	8,108	221,857	229,965	9,324	177,895	187,219
TRANSPORT									
TPT	5,350	11,801	17,151	9,120	12,243	21,363	15,777	8,173	23,950
TPT-ADM	3,600	2,486	6,086	5,584	3,829	9,413	6,069	4,555	10,624
TPT-MAR	1,321	7,192	8,513	2,809	6,118	8,927	8,445	1,466	9,911
TPT-AIR	303	2,104	2,407	583	2,260	2,843	1,048	2,116	3,164
TPT-SUR	126	19	145	144	36	180	215	36	251
CTC	1,439	1,319	2,758	1,462	1,253	2,715	1,732	1,523	3,255
TREASURY BOARD									
TB	113	10,553	10,666	113	12,814	12,927	128	15,316	15,444
TB-ADM	113	10,553	10,666	113	12,814	12,927	128	15,316	15,444
TOTAL	1,335,092	786,162	2,121,254	1,643,337	961,186	2,604,523	1,914,702	1,026,737	2,941,439

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	141,694	10,675	152,369	157,945	10,577	168,522	184,076	11,993	196,069
AGR-ADM	4,200	---	4,200	4,783	---	4,783	5,084	---	5,084
AGR-DEV	130,025	10,671	140,696	144,548	10,573	155,121	166,825	11,989	178,814
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	2,879	4	2,883	3,511	4	3,515	4,186	4	4,190
CDC	---	598	598	---	2,200	2,200	---	2,500	2,500
CLFB	69	20	89	82	10	92	100	45	145
COMMUNICATIONS									
COMM	45,962	20,017	65,979	53,960	28,323	82,283	56,331	11,210	67,541
COMM-COMM	45,577	19,745	65,322	53,411	27,889	81,300	55,881	10,845	66,726
COMM-AC	385	272	657	549	434	983	450	365	815
CBC	1,738	1,898	3,636	1,867	2,175	4,042	2,123	2,484	4,607
CRTC	534	68	602	519	160	679	569	250	819
NFB	634	---	634	603	---	603	697	---	697
NLIB	17,225	20	17,245	21,536	73	21,609	25,796	46	25,842
NMUS	44,086	9,929	54,015	48,401	10,254	58,655	50,855	10,938	61,793
PA	10,817	---	10,817	11,960	---	11,960	13,689	---	13,689
SSHRC	4,002	38,376	42,378	4,451	42,150	46,601	5,328	51,348	56,676
CONSUMER AND CORPORATE AFFAIRS									
CCA	16,621	803	17,424	17,631	1,487	19,118	21,451	1,724	23,175
CCA-ADM	---	---	---	2,045	987	3,032	2,761	1,094	3,855
CCA-CON	3,022	559	3,581	2,435	---	2,435	2,850	---	2,850
CCA-COR	13,080	83	13,163	12,537	---	12,537	14,881	---	14,881
CCA-CICP	519	161	680	614	500	1,114	959	630	1,589
ECONOMIC DEVELOPMENT									
ED	1,527	150	1,677	1,888	150	2,038	2,343	150	2,493
EMPLOYMENT & IMMIGRATION									
EI	8,638	891	9,529	8,733	869	9,602	9,272	908	10,180
EI-ADM	8,638	891	9,529	8,733	869	9,602	9,272	908	10,180
CEIC	4,573	3,185	7,758	8,436	819	9,255	7,326	800	8,126
ENERGY MINES & RESOURCES									
EMR	115,422	63,637	179,059	139,526	90,173	229,699	174,253	106,227	280,480
EMR-ENER	2,239	46,289	48,528	2,954	67,388	70,342	5,776	75,816	81,592
EMR-MES	113,183	17,348	130,531	136,572	22,785	159,357	168,477	30,411	198,888
AECB	240	535	775	270	829	1,099	311	1,760	2,071
AECL	74,129	22,643	96,772	87,959	26,223	114,182	102,582	29,802	132,384
NEB	1,677	12	1,689	2,143	33	2,176	2,190	---	2,190
ENVIRONMENT									
ENV	217,531	29,619	247,150	246,046	32,972	279,018	300,304	33,799	334,103
ENV-ADM	1,840	---	1,840	1,929	---	1,929	2,120	---	2,120
ENV-ES	203,736	28,962	232,698	230,967	32,249	263,216	283,562	32,992	316,554
ENV-EPS	5,353	3,407	8,760	4,933	3,237	8,170	5,528	4,472	10,000
ENV-AES	111,831	4,002	115,833	129,540	4,567	134,107	160,303	4,447	164,750
ENV-ECS	51,009	6,816	57,825	55,067	7,579	62,646	64,152	8,290	72,442
ENV-FOR	35,543	14,737	50,280	41,427	16,866	58,293	53,579	15,783	69,362
ENV-PC	11,955	657	12,612	13,150	723	13,873	14,622	807	15,429
EXTERNAL AFFAIRS									
EA	4,317	1,612	5,929	4,888	1,762	6,650	5,282	1,938	7,220
EA-CIA	4,317	1,612	5,929	4,888	1,762	6,650	5,282	1,938	7,220
CIDA	2,198	34,293	36,491	2,417	37,958	40,375	2,810	42,164	44,974
IDRC	12,052	27,746	39,798	14,180	31,859	46,039	17,424	39,202	56,626
IJC	2,249	79	2,328	2,657	114	2,771	2,786	202	2,988
FINANCE									
FIN	8,514	---	8,514	10,077	---	10,077	12,613	---	12,613
FIN-FEP	8,514	---	8,514	10,077	---	10,077	12,613	---	12,613
FISHERIES AND OCEANS									
F&O	107,087	9,316	116,403	117,225	12,746	129,971	127,471	18,322	145,793
F&O-FM	107,087	9,316	116,403	117,225	12,746	129,971	127,471	18,322	145,793
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	3,455	1,502	4,957	4,037	2,385	6,422	4,202	2,696	6,898
IAND-IIA	---	---	---	80	300	380	95	300	395
IAND-NA	3,455	1,502	4,957	3,957	2,085	6,042	4,107	2,396	6,503
INDUSTRY TRADE AND COMMERCE									
ITC	6,436	91,054	97,490	7,291	136,255	143,546	8,789	164,525	173,314
ITC-TI	6,197	89,720	95,917	7,028	135,001	142,029	8,521	163,354	171,875
ITC-TOUR	189	156	345	208	171	379	208	171	379
ITC-GO	50	1,178	1,228	55	1,083	1,138	60	1,000	1,060

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	2,497	1,784	4,281	3,451	2,561	6,012	4,311	3,803	8,114
JUST-ADM	945	1,784	2,729	1,351	2,561	3,912	2,211	3,803	6,014
JUST-CUIO	1,552	---	1,552	2,100	---	2,100	2,100	---	2,100
CHRC	304	---	304	288	---	288	325	---	325
LRC	542	924	1,466	689	1,660	2,349	870	2,068	2,938
LABOUR									
LAB	3,446	367	3,813	3,790	401	4,191	4,272	452	4,724
NATIONAL DEFENCE									
NDEF	73,705	28,866	102,571	75,754	36,272	112,026	84,427	55,143	139,570
NDEF-SER	73,705	28,866	102,571	75,754	36,272	112,026	84,427	55,143	139,570
NATIONAL HEALTH AND WELFARE									
NHW	44,847	18,965	63,812	50,467	22,147	72,614	59,013	21,898	80,911
NHW-ADM	4,254	1,720	5,974	5,826	2,235	8,061	6,744	2,255	8,999
NHW-HSS	1,660	15,596	17,256	1,979	16,764	18,743	2,020	16,546	18,566
NHW-MS	1,745	341	2,086	2,918	1,000	3,918	2,167	---	2,167
NHW-HP	36,657	1,308	37,965	39,132	2,148	41,280	47,165	3,097	50,262
NHW-IS	531	---	531	612	---	612	917	---	917
MRC	1,556	80,475	82,031	1,757	98,410	100,167	1,976	110,908	112,884
NATIONAL REVENUE									
NREV	4,486	---	4,486	10,718	---	10,718	6,986	---	6,986
NREV-TAX	4,486	---	4,486	10,718	---	10,718	6,986	---	6,986
PRIVY COUNCIL									
PC	---	549	549	---	589	589	---	89	89
COL	975	---	975	1,172	---	1,172	3,097	---	3,097
ECC	7,497	533	8,030	6,902	490	7,392	7,319	495	7,814
PUBLIC WORKS									
PW	3,944	4,366	8,310	5,511	2,146	7,657	5,508	2,630	8,138
PW-PTS	3,944	4,366	8,310	5,511	2,146	7,657	5,508	2,630	8,138
CMHC	8,308	4,272	12,580	9,025	6,790	15,815	9,889	6,997	16,886
NCC	203	49	252	381	206	587	494	140	634
REGIONAL ECONOMIC EXPANSION									
REE	820	1,663	2,483	1,011	2,276	3,287	1,198	7,087	8,285
SCIENCE AND TECHNOLOGY									
ST	6,472	1,890	8,362	7,549	2,039	9,588	8,382	2,430	10,812
NRC	159,801	66,301	226,102	193,362	104,012	297,374	240,469	120,223	360,692
NRC-SIR	145,143	66,301	211,444	174,838	103,946	278,784	218,878	120,149	339,027
NRC-STI	14,658	---	14,658	18,524	66	18,590	21,591	74	21,665
NSERC	3,346	159,525	162,871	4,312	197,491	201,803	5,686	221,395	227,081
SC	2,504	386	2,890	2,937	605	3,542	3,357	690	4,047
SECRETARY OF STATE									
SECS	4,742	4,331	9,073	5,724	4,293	10,017	5,453	5,488	10,941
SECS-OL	71	782	853	91	725	816	91	940	1,031
SECS-ES	139	---	139	415	---	415	465	430	895
SECS-TRA	4,459	662	5,121	5,141	540	5,681	4,545	790	5,335
SECS-CIT	73	2,887	2,960	77	3,028	3,105	352	3,328	3,680
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	1,525	2,650	4,175	1,810	3,859	5,669	1,810	3,359	5,169
SGEN-ADM	1,525	2,650	4,175	1,810	3,859	5,669	1,810	3,359	5,169
RCMP	---	71	71	150	145	295	150	150	300
SUPPLY AND SERVICES									
SS	107	14,846	14,953	117	15,000	15,117	128	15,000	15,128
SS-SUPP	107	14,846	14,953	117	15,000	15,117	128	15,000	15,128
STCAN	144,044	90	144,134	229,844	121	229,965	187,110	109	187,219
TRANSPORT									
TPT	9,002	8,149	17,151	9,904	11,459	21,363	7,365	16,585	23,950
TPT-ADM	1,529	4,557	6,086	2,580	6,833	9,413	3,117	7,507	10,624
TPT-MAR	7,066	1,447	8,513	6,463	2,464	8,927	2,890	7,021	9,911
TPT-AIR	308	2,099	2,407	740	2,103	2,843	1,167	1,997	3,164
TPT-SUR	99	46	145	121	59	180	191	60	251
CTC	2,330	428	2,758	2,237	478	2,715	2,777	478	3,255
TREASURY BOARD									
TB	10,553	113	10,666	12,814	113	12,927	15,316	128	15,444
TB-ADM	10,553	113	10,666	12,814	113	12,927	15,316	128	15,444
TOTAL	1,350,983	770,271	2,121,254	1,618,404	986,119	2,604,523	1,808,661	1,132,778	2,941,439

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INTRAMURAL, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	133,972	7,722	141,694	148,842	9,103	157,945	174,127	9,949	184,076
AGR-ADM	---	4,200	4,200	---	4,783	4,783	---	5,084	5,084
AGR-DEV	128,032	1,993	130,025	142,086	2,462	144,548	164,229	2,596	166,825
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	1,350	1,529	2,879	1,653	1,858	3,511	1,917	2,269	4,186
CLFB	51	18	69	61	21	82	77	23	100
COMMUNICATIONS									
COMM	41,740	4,222	45,962	49,669	4,291	53,960	51,905	4,426	56,331
COMM-COMM	41,740	3,837	45,577	49,669	3,742	53,411	51,905	3,976	55,881
COMM-AC	---	385	385	---	549	549	---	450	450
CBC	---	1,738	1,738	---	1,867	1,867	---	2,123	2,123
CRTC	534	---	534	519	---	519	569	---	569
NFB	382	252	634	427	176	603	497	200	697
NLIB	---	17,225	17,225	---	21,536	21,536	---	25,796	25,796
NMUS	2,613	41,473	44,086	5,458	42,943	48,401	6,198	44,657	50,855
PA	---	10,817	10,817	---	11,960	11,960	---	13,689	13,689
SSHRC	2,054	1,948	4,002	2,269	2,182	4,451	2,998	2,330	5,328
CONSUMER AND CORPORATE AFFAIRS									
CCA	2,020	14,601	16,621	2,601	15,030	17,631	3,543	17,908	21,451
CCA-ADM	---	---	0	2,045	---	2,045	2,761	---	2,761
CCA-CON	852	2,170	3,022	---	2,435	2,435	---	2,850	2,850
CCA-COR	705	12,375	13,080	---	12,537	12,537	---	14,881	14,881
CCA-CICP	463	56	519	556	58	614	782	177	959
ECONOMIC DEVELOPMENT									
ED	---	1,527	1,527	---	1,888	1,888	---	2,343	2,343
EMPLOYMENT & IMMIGRATION									
EI	1,465	7,173	8,638	1,428	7,305	8,733	1,518	7,754	9,272
EI-ADM	1,465	7,173	8,638	1,428	7,305	8,733	1,518	7,754	9,272
CEIC	---	4,573	4,573	---	8,436	8,436	---	7,326	7,326
ENERGY MINES & RESOURCES									
EMR	72,902	42,520	115,422	91,682	47,844	139,526	119,151	55,102	174,253
EMR-ENER	420	1,819	2,239	1,045	1,909	2,954	3,184	2,592	5,776
EMR-MES	72,482	40,701	113,183	90,637	45,935	136,572	115,967	52,510	168,477
AECB	240	---	240	270	---	270	311	---	311
AECL	68,819	5,310	74,129	82,431	5,528	87,959	95,428	7,154	102,582
NEB	---	1,677	1,677	---	2,143	2,143	---	2,190	2,190
ENVIRONMENT									
ENV	67,927	149,604	217,531	78,981	167,145	246,046	97,757	202,547	300,304
ENV-ADM	399	1,441	1,840	432	1,497	1,929	475	1,645	2,120
ENV-ES	67,419	136,317	203,736	78,350	152,617	230,967	97,150	186,412	283,562
ENV-EPS	2,306	3,047	5,353	2,398	2,535	4,933	2,923	2,605	5,528
ENV-AES	18,091	93,740	111,831	21,796	107,744	129,540	25,923	134,380	160,303
ENV-ECS	16,229	34,780	51,009	17,572	37,495	55,067	20,268	43,884	64,152
ENV-FOR	30,793	4,750	35,543	36,584	4,843	41,427	48,036	5,543	53,579
ENV-PC	109	11,846	11,955	119	13,031	13,150	132	14,490	14,622
EXTERNAL AFFAIRS									
EA	---	4,317	4,317	---	4,888	4,888	---	5,282	5,282
EA-CIA	---	4,317	4,317	---	4,888	4,888	---	5,282	5,282
CIDA	370	1,828	2,198	436	1,981	2,417	471	2,339	2,810
IDRC	7,298	4,754	12,052	8,655	5,525	14,180	10,702	6,722	17,424
IJC	---	2,249	2,249	---	2,657	2,657	---	2,786	2,786
FINANCE									
FIN	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FIN-FEP	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FISHERIES AND OCEANS									
F&O	51,034	56,053	107,087	55,725	61,500	117,225	54,054	73,417	127,471
F&O-FM	51,034	56,053	107,087	55,725	61,500	117,225	54,054	73,417	127,471
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	2,013	1,442	3,455	2,296	1,741	4,037	2,332	1,870	4,202
IAND-IIA	---	---	0	2	78	80	13	82	95
IAND-NA	2,013	1,442	3,455	2,294	1,663	3,957	2,319	1,788	4,107
INDUSTRY TRADE AND COMMERCE									
ITC	6,338	98	6,436	7,183	108	7,291	8,681	108	8,789
ITC-TI	6,197	---	6,197	7,028	---	7,028	8,521	---	8,521
ITC-TOUR	91	98	189	100	108	208	100	108	208
ITC-GO	50	---	50	55	---	55	60	---	60

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INTRAMURAL, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
JUSTICE									
JUST	677	1,820	2,497	1,013	2,438	3,451	1,825	2,486	4,311
JUST-ADM	677	268	945	1,013	338	1,351	1,825	386	2,211
JUST-CUIO	---	1,552	1,552	---	2,100	2,100	---	2,100	2,100
CHRC	---	304	304	---	288	288	---	325	325
LRC	246	296	542	387	302	689	511	359	870
LABOUR									
LAB	411	3,035	3,446	452	3,338	3,790	509	3,763	4,272
NATIONAL DEFENCE									
NDEF	71,752	1,953	73,705	73,515	2,239	75,754	81,938	2,489	84,427
NDEF-SER	71,752	1,953	73,705	73,515	2,239	75,754	81,938	2,489	84,427
NATIONAL HEALTH AND WELFARE									
NHW	14,556	30,291	44,847	16,635	33,832	50,467	18,346	40,667	59,013
NHW-ADM	1,527	2,727	4,254	1,996	3,830	5,826	2,337	4,407	6,744
NHW-HSS	938	722	1,660	1,071	908	1,979	1,109	911	2,020
NHW-MS	1,745	---	1,745	2,918	---	2,918	2,167	---	2,167
NHW-HP	10,346	26,311	36,657	10,650	28,482	39,132	12,733	34,432	47,165
NHW-IS	---	531	531	---	612	612	---	917	917
MRC	1,435	121	1,556	1,618	139	1,757	1,821	155	1,976
NATIONAL REVENUE									
NREV	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
NREV-TAX	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
PRIVY COUNCIL									
COL	---	975	975	---	1,172	1,172	---	3,097	3,097
ECC	6,486	1,011	7,497	5,950	952	6,902	6,319	1,000	7,319
PUBLIC WORKS									
PW	1,318	2,626	3,944	353	5,158	5,511	777	4,731	5,508
PW-PTS	1,318	2,626	3,944	353	5,158	5,511	777	4,731	5,508
CMHC	3,000	5,308	8,308	3,550	5,475	9,025	3,890	5,999	9,889
NCC	---	203	203	---	381	381	---	494	494
REGIONAL ECONOMIC EXPANSION									
REE	820	---	820	1,011	---	1,011	1,198	---	1,198
SCIENCE AND TECHNOLOGY									
ST	---	6,472	6,472	---	7,549	7,549	---	8,382	8,382
NRC	126,182	33,619	159,801	153,342	40,020	193,362	194,891	45,578	240,469
NRC-SIR	126,182	18,961	145,143	153,342	21,496	174,838	194,891	23,987	218,878
NRC-STI	---	14,658	14,658	---	18,524	18,524	---	21,591	21,591
NSERC	2,677	669	3,346	3,450	862	4,312	4,548	1,138	5,686
SC	1,112	1,392	2,504	1,307	1,630	2,937	1,511	1,846	3,357
SECRETARY OF STATE									
SECS	2,378	2,364	4,742	2,950	2,774	5,724	2,608	2,845	5,453
SECS-OL	---	71	71	---	91	91	---	91	91
SECS-ES	---	139	139	---	415	415	---	465	465
SECS-TRA	2,378	2,081	4,459	2,950	2,191	5,141	2,608	1,937	4,545
SECS-CIT	---	73	73	---	77	77	---	352	352
SOLICITOR GENERAL									
SGEN	775	750	1,525	938	872	1,810	938	872	1,810
SGEN-ADM	775	750	1,525	938	872	1,810	938	872	1,810
RCMP	---	---	0	150	---	150	150	---	150
SUPPLY AND SERVICES									
SS	88	19	107	97	20	117	106	22	128
SS-SUPP	88	19	107	97	20	117	106	22	128
STCAN	5,828	138,216	144,044	8,108	221,736	229,844	9,324	177,786	187,110
TRANSPORT									
TPT	1,691	7,311	9,002	2,846	7,058	9,904	4,429	2,936	7,365
TPT-ADM	696	833	1,529	1,223	1,357	2,580	1,192	1,925	3,117
TPT-MAR	682	6,464	7,066	945	5,518	6,463	2,024	866	2,890
TPT-AIR	303	5	308	583	157	740	1,048	119	1,167
TPT-SUR	90	9	99	95	26	121	165	26	191
CTC	1,139	1,191	2,330	1,092	1,145	2,237	1,362	1,415	2,777
TREASURY BOARD									
TB	---	10,553	10,553	---	12,814	12,814	---	15,316	15,316
TB-ADM	---	10,553	10,553	---	12,814	12,814	---	15,316	15,316
TOTAL	705,170	645,813	1,350,983	818,445	799,959	1,618,404	968,116	840,545	1,808,661

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INDUSTRY, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	3,060	---	3,060	3,764	25	3,789	5,082	50	5,132
AGR-DEV	3,060	---	3,060	3,764	25	3,789	5,082	50	5,132
CDC	---	196	196	---	1,100	1,100	---	1,300	1,300
CLFB	---	---	0	---	---	0	20	5	25
COMMUNICATIONS									
COMM	16,390	984	17,374	22,822	1,089	23,911	9,025	1,130	10,155
COMM-COMM	16,390	736	17,126	22,822	705	23,527	9,025	790	9,815
COMM-AC	---	248	248	---	384	384	---	340	340
CBC	---	1,898	1,898	---	2,175	2,175	---	2,484	2,484
CRTC	---	---	0	---	---	0	50	---	50
NMUS	---	610	610	---	632	632	---	696	696
CONSUMER AND CORPORATE AFFAIRS									
CCA	122	70	192	209	150	359	233	200	433
CCA-ADM	---	---	0	209	---	209	233	---	233
CCA-CON	99	---	99	---	---	0	---	---	0
CCA-COR	23	---	23	---	---	0	---	---	0
CCA-CICP	---	70	70	---	150	150	---	200	200
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
EI	7	718	725	49	820	869	50	850	900
EI-ADM	7	718	725	49	820	869	50	850	900
CEIC	---	1,781	1,781	---	779	779	---	800	800
ENERGY MINES & RESOURCES									
EMR	21,203	6,228	27,423	27,129	7,356	34,485	26,054	10,635	36,689
EMR-ENER	16,605	819	17,424	18,583	2,682	21,265	15,485	3,841	19,326
EMR-MES	4,598	5,401	9,999	8,546	4,674	13,220	10,569	6,794	17,363
AECB	270	---	270	411	---	411	1,100	---	1,100
AECL	7,655	12,590	20,245	11,155	12,413	23,568	12,248	14,695	26,943
ENVIRONMENT									
ENV	13,256	1,709	14,965	14,131	1,935	16,066	12,206	1,860	14,146
ENV-ES	13,100	1,644	14,744	13,959	1,064	15,823	12,093	1,782	13,875
ENV-EPS	2,102	285	2,387	2,200	240	2,440	3,435	240	3,675
ENV-AES	---	473	473	---	634	634	---	418	418
ENV-ECS	198	886	1,084	200	990	1,198	256	1,124	1,382
ENV-FOR	10,800	---	10,800	11,551	---	11,551	8,400	---	8,400
ENV-PC	156	65	221	172	71	243	193	78	271
EXTERNAL AFFAIRS									
CIDA	---	22,400	22,400	---	24,640	24,640	---	27,104	27,104
FINANCE									
FISHERIES AND OCEANS									
F&O	3,350	1,965	5,315	5,230	3,423	8,661	7,092	6,164	13,256
F&O-FM	3,350	1,965	5,315	5,230	3,423	8,661	7,092	6,164	13,256
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	422	41	463	261	56	317	588	125	713
IAND-NA	422	41	463	261	56	317	588	125	713
INDUSTRY TRADE AND COMMERCE									
ITC	84,340	2,728	87,068	128,266	3,590	131,856	156,054	4,273	160,327
ITC-TI	83,416	2,728	86,144	127,413	3,590	131,003	155,283	4,273	159,556
ITC-TOUR	156	---	156	171	---	171	171	---	171
ITC-GO	768	---	768	682	---	682	600	---	600
JUSTICE									
LRC	---	257	257	---	580	580	---	829	829
LABOUR									
LAB	45	75	120	49	82	131	55	93	148
NATIONAL DEFENCE									
NDEF	22,972	72	23,044	29,708	85	29,793	47,093	82	47,175
NDEF-SER	22,972	72	23,044	29,708	85	29,793	47,093	82	47,175
NATIONAL HEALTH AND WELFARE									
NHW	221	360	581	320	833	1,153	415	1,286	1,701
NHW-HSS	206	63	269	217	569	786	270	986	1,256
NHW-HP	15	297	312	103	264	367	145	300	445
NATIONAL REVENUE									
PRIVY COUNCIL									
ECC	296	---	296	300	---	300	300	---	300
PUBLIC WORKS									
PW	2,937	1,125	4,062	1,045	908	1,953	1,553	990	2,543
PW-PTS	2,937	1,125	4,062	1,045	908	1,953	1,553	990	2,543
CMHC	1,345	1,147	2,492	2,150	1,878	4,028	2,245	1,903	4,148
NCC	---	34	34	---	190	190	---	130	130
REGIONAL ECONOMIC EXPANSION									
REE	52	626	678	60	1,046	1,106	60	1,230	1,290
SCIENCE AND TECHNOLOGY									
NRC	46,020	666	46,686	74,090	963	75,053	85,775	812	86,587
NRC-SIR	46,020	666	46,686	74,090	963	75,053	85,775	812	86,587
NSERC	1,639	---	1,639	2,839	400	3,239	3,945	447	4,392
SC	152	---	152	247	---	247	282	---	282
SECRETARY OF STATE									
SECS	---	302	302	---	550	550	---	980	900
SECS-OL	---	302	302	---	200	200	---	200	200
SECS-ES	---	---	0	---	---	0	---	430	430
SECS-CIT	---	---	0	---	350	350	---	350	350
SOLICITOR GENERAL									
SGEN	635	685	1,320	833	615	1,448	850	615	1,465
SGEN-ADM	635	685	1,320	833	615	1,448	850	615	1,465
RCMP	42	---	42	60	---	60	90	---	90
SUPPLY AND SERVICES									
SS	10,647	2,128	12,775	10,765	2,097	12,862	10,767	2,097	12,864
SS-SUPP	10,647	2,128	12,775	10,765	2,097	12,862	10,767	2,097	12,864
TRANSPORT									
TPT	3,240	4,196	7,436	5,816	4,622	10,438	10,849	4,602	15,451
TPT-ADM	2,595	1,389	3,984	3,952	1,939	5,891	4,428	2,025	6,453
TPT-MAR	645	708	1,353	1,864	580	2,444	6,421	580	7,001
TPT-AIR	---	2,099	2,099	---	2,103	2,103	---	1,997	1,997
CTC	150	128	278	200	108	308	200	100	300
TREASURY BOARD									
TOTAL	240,468	65,631	306,099	341,917	75,140	417,057	394,361	88,583	482,944

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

UNIVERSITY, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	3,752	---	3,752	4,369	13	4,382	5,554	13	5,567
AGR-DEV	3,752	---	3,752	4,369	13	4,382	5,554	13	5,567
CDC	---	102	102	---	700	700	---	800	800
CLFB	3	---	3	---	---	0	---	---	0
COMMUNICATIONS									
COMM	975	57	1,032	1,025	100	1,125	960	95	1,055
COMM-COMM	975	33	1,008	1,025	60	1,085	960	70	1,030
COMM-AC	---	24	24	---	40	40	---	25	25
CRTC	---	---	0	40	---	40	85	---	85
NRUS	---	901	901	---	928	928	---	1,003	1,003
SSHRC	23,514	9,749	33,263	25,605	11,045	36,650	32,720	12,438	45,158
CONSUMER AND CORPORATE AFFAIRS									
CCA	74	10	84	245	100	345	277	100	377
CCA-ADM	---	---	0	245	---	245	277	---	277
CCA-CON	20	---	20	---	---	0	---	---	0
CCA-COR	54	---	54	---	---	0	---	---	0
CCA-CICP	---	10	10	---	100	100	---	100	100
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
EI	---	10	10	---	---	0	---	---	0
EI-ADM	---	10	10	---	---	0	---	---	0
CEIC	---	18	18	---	17	17	---	---	0
ENERGY MINES & RESOURCES									
EMR	2,987	141	3,128	4,318	171	4,489	4,692	182	4,874
EMR-ENER	215	16	231	130	---	130	130	---	130
EMR-MES	2,772	125	2,897	4,188	171	4,359	4,562	182	4,744
AECB	219	---	219	364	---	364	558	---	558
AECL	1,701	24	1,885	1,900	39	1,939	2,136	30	2,166
ENVIRONMENT									
ENV	3,263	332	3,595	3,445	496	3,941	3,438	550	4,188
ENV-ES	3,186	324	3,510	3,361	486	3,847	3,536	548	4,084
ENV-EPS	515	---	515	315	---	315	315	---	315
ENV-AES	614	211	825	732	358	1,090	775	488	1,103
ENV-ECS	827	113	940	896	128	1,024	967	140	1,107
ENV-FOR	1,230	---	1,230	1,418	---	1,419	1,479	---	1,479
ENV-PC	77	8	85	84	10	94	94	10	104
EXTERNAL AFFAIRS									
EA	---	1,488	1,488	---	1,628	1,628	---	1,782	1,782
EA-CIA	---	1,488	1,488	---	1,628	1,628	---	1,782	1,782
CIDA	350	1,961	2,311	400	2,156	2,556	400	2,373	2,773
IDRC	213	---	213	624	103	727	1,393	154	1,547
FINANCE									
FISHERIES AND OCEANS									
F&O	1,220	108	1,328	1,197	109	1,306	1,558	108	1,658
F&O-FM	1,220	108	1,328	1,197	109	1,306	1,558	108	1,658
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	694	22	716	889	33	922	1,009	15	1,024
IAND-NA	694	22	716	889	33	922	1,009	15	1,024
INDUSTRY TRADE AND COMMERCE									
ITC	1,666	475	2,141	3,376	505	3,881	3,350	305	3,655
ITC-TI	1,631	475	2,106	3,350	505	3,855	3,350	305	3,655
ITC-GO	35	---	35	26	---	26	---	---	0
JUSTICE									
JUST	---	32	32	---	46	46	---	51	51
JUST-ADM	---	32	32	---	46	46	---	51	51
LABOUR									
LAB	125	45	170	137	49	186	154	55	209
NATIONAL DEFENCE									
NDEF	2,805	53	2,858	4,210	78	4,288	5,026	76	5,102
NDEF-SER	2,805	53	2,858	4,210	78	4,288	5,026	76	5,102
NATIONAL HEALTH AND WELFARE									
NHW	8,794	2,347	11,131	9,372	2,134	11,506	9,028	2,281	11,309
NHW-ADM	150	---	150	165	---	165	185	---	185
NHW-HSS	8,194	2,244	10,438	8,966	2,032	10,998	7,913	2,159	10,072
NHW-HP	440	103	543	241	102	343	930	122	1,052
MRC	75,214	2,283	77,497	92,854	2,983	95,037	103,745	3,362	107,107
NATIONAL REVENUE									
PRIVY COUNCIL									
PC	49	---	49	53	---	53	8	---	8
ECC	197	---	197	150	---	150	150	---	150
PUBLIC WORKS									
PW	---	43	43	10	5	15	10	---	10
PW-PTS	---	43	43	10	5	15	10	---	10
CMHC	40	631	671	92	914	1,006	105	940	1,045
REGIONAL ECONOMIC EXPANSION									
REE	---	19	19	---	4	4	---	---	0
SCIENCE AND TECHNOLOGY									
ST	---	2	2	---	---	0	---	---	0
NRC	14,963	701	15,664	20,194	797	20,991	23,824	895	24,719
NRC-SIR	14,963	701	15,664	20,194	797	20,991	23,824	895	24,719
NSERC	138,848	13,419	152,267	170,192	17,467	187,659	189,939	19,531	209,470
SC	22	---	22	54	---	54	61	---	61
SECRETARY OF STATE									
SECS	490	---	490	250	55	305	500	55	555
SECS-TRA	490	---	490	250	---	250	500	---	500
SECS-CIT	---	---	0	---	55	55	---	55	55
SOLICITOR GENERAL									
SGEN	879	20	899	1,072	---	1,072	1,055	---	1,055
SGEN-ADM	879	20	899	1,072	---	1,072	1,055	---	1,055
RCMP	29	---	29	85	---	85	60	---	60
SUPPLY AND SERVICES									
SS	1,131	281	1,412	1,070	318	1,388	1,070	318	1,388
SS-SUPP	1,131	281	1,412	1,070	318	1,388	1,070	318	1,388
TRANSPORT									
TPT	175	103	278	341	82	423	375	84	459
TPT-ADM	175	103	278	341	82	423	375	84	459
CTC	125	---	125	145	---	145	145	---	145
TREASURY BOARD									
TOTAL	284,587	35,369	319,956	347,278	43,067	390,345	393,577	47,588	441,165

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

NON-PROFIT INSTITUTIONS, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	397	---	397	502	---	502	681	---	681
AGR-DEV	397	---	397	502	---	502	681	---	681
CDC	---	300	300	---	400	400	---	400	400
COMMUNICATIONS									
COMM	---	8	8	---	20	20	---	---	0
COMM-COMM	---	8	8	---	10	10	---	---	0
COMM-AC	---	---	0	---	10	10	---	---	0
CRTC	34	---	34	35	---	35	40	---	40
NMUS	---	1,061	1,061	---	1,097	1,097	---	1,190	1,190
SSHRC	---	2,502	2,502	---	2,400	2,400	---	2,701	2,701
CONSUMER AND CORPORATE AFFAIRS									
CCA	11	---	11	13	---	13	14	---	14
CCA-ADM	---	---	0	13	---	13	14	---	14
CCA-CON	11	---	11	---	---	0	---	---	0
ECONOMIC DEVELOPMENT									
ED	---	150	150	---	150	150	---	150	150
EMPLOYMENT & IMMIGRATION									
EI	---	100	100	---	---	0	---	---	0
EI-ADM	---	100	100	---	---	0	---	---	0
ENERGY MINES & RESOURCES									
EMR	767	38	805	1,926	32	1,958	2,426	30	2,456
EMR-ENER	17	8	25	1,710	---	1,710	2,110	---	2,110
EMR-MES	750	30	780	216	32	248	316	30	346
AECB	3	---	3	5	---	5	10	---	10
ENVIRONMENT									
ENV	2,724	190	2,914	3,660	224	3,884	5,630	251	5,881
ENV-ES	2,724	32	2,756	3,660	50	3,710	5,630	56	5,686
ENV-EPS	236	---	236	75	---	75	75	---	75
ENV-AES	13	16	29	---	32	32	---	36	36
ENV-ECS	---	16	16	---	18	18	---	20	20
ENV-FOR	2,475	---	2,475	3,585	---	3,585	5,555	---	5,555
ENV-PC	---	158	158	---	174	174	---	195	195
EXTERNAL AFFAIRS									
IDRC	317	---	317	320	71	391	534	109	643
FINANCE									
FISHERIES AND OCEANS									
F&O	1,485	325	1,810	1,479	---	1,479	1,721	---	1,721
F&O-FM	1,485	325	1,810	1,479	---	1,479	1,721	---	1,721
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	56	9	65	173	525	698	177	385	562
IAND-NA	56	9	65	173	525	698	177	385	562
INDUSTRY TRADE AND COMMERCE									
ITC	375	---	375	375	---	375	400	---	400
ITC-GO	375	---	375	375	---	375	400	---	400
JUSTICE									
JUST	611	300	911	700	300	1,000	420	400	820
JUST-ADM	611	300	911	700	300	1,000	420	400	820
LRC	---	---	0	7	---	7	0	---	0
LABOUR									
LAB	15	---	15	16	---	16	10	---	10
NATIONAL DEFENCE									
NATIONAL HEALTH AND WELFARE									
NHW	2,799	1,442	4,241	2,732	1,643	4,375	2,989	1,638	4,627
NHW-HSS	2,748	1,442	4,190	2,646	1,643	4,289	2,804	1,638	4,442
NHW-HP	51	---	51	86	---	86	185	---	185
MRC	---	135	135	---	157	157	---	177	177
NATIONAL REVENUE									
PRIVY COUNCIL									
PC	500	---	500	536	---	536	81	---	81
ECC	10	---	10	15	---	15	30	---	30
PUBLIC WORKS									
PW	---	49	49	---	34	34	---	35	35
PW-PTS	---	49	49	---	34	34	---	35	35
CMHC	96	351	447	105	594	699	105	613	718
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
NRC	140	---	140	1,064	66	1,130	1,017	74	1,091
NRC-SIR	140	---	140	1,064	---	1,064	1,017	---	1,017
NRC-STI	---	---	0	---	66	66	---	74	74
NSERC	1,558	834	2,392	1,722	975	2,697	2,065	1,160	3,225
SC	26	---	26	30	---	30	33	---	33
SECRETARY OF STATE									
SECS	2,409	140	2,549	2,224	340	2,564	2,739	340	3,079
SECS-OL	480	---	480	509	---	509	724	---	724
SECS-CIT	1,929	140	2,069	1,715	340	2,055	2,015	340	2,355
SOLICITOR GENERAL									
SGEN	26	10	36	32	---	32	32	---	32
SGEN-ADM	26	10	36	32	---	32	32	---	32
SUPPLY AND SERVICES									
SS	75	31	106	100	48	148	100	48	148
SS-SUPP	75	31	106	100	48	148	100	48	148
TRANSPORT									
TPT	25	---	25	24	---	24	50	---	50
TPT-SUR	25	---	25	24	---	24	50	---	50
TREASURY BOARD									
TB	113	---	113	113	---	113	120	---	120
TB-ADM	113	---	113	113	---	113	120	---	120
TOTAL	14,572	7,975	22,547	17,908	9,076	26,984	21,448	9,709	31,157

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

PROVINCIAL & MUNICIPAL GOVERNMENTS. BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	1,692	---	1,692	295	---	295	---	---	0
AGR-DEV	1,692	---	1,692	295	---	295	---	---	0
COMMUNICATIONS									
NMUS	---	5,887	5,887	---	6,073	6,073	---	6,601	6,601
CONSUMER AND CORPORATE AFFAIRS									
CCA	16	---	16	19	---	19	21	---	21
CCA-ADM	---	---	0	19	---	19	21	---	21
CCA-CON	16	---	16	---	---	0	---	---	0
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
EI	36	---	36	---	---	0	---	---	0
EI-ADM	36	---	36	---	---	0	---	---	0
ENERGY MINES & RESOURCES									
EMR	29,773	---	29,773	46,021	---	46,021	56,885	---	56,885
EMR-ENER	28,305	---	28,305	44,283	---	44,283	54,250	---	54,250
EMR-MES	1,468	---	1,468	1,738	---	1,738	2,635	---	2,635
AECB	23	---	23	---	---	0	20	---	20
ENVIRONMENT									
ENV	229	4,093	4,322	300	4,525	4,825	272	4,873	5,145
ENV-ES	228	4,093	4,321	299	4,525	4,824	271	4,873	5,144
ENV-EPS	50	---	50	60	---	60	60	---	60
ENV-AES	---	117	117	---	120	120	---	123	123
ENV-ECS	58	3,976	4,034	99	4,405	4,504	108	4,750	4,858
ENV-FOR	120	---	120	140	---	140	103	---	103
ENV-PC	1	---	1	1	---	1	1	---	1
EXTERNAL AFFAIRS									
FINANCE									
FISHERIES AND OCEANS									
F&O	---	20	20	---	74	74	---	190	190
F&O-FM	---	20	20	---	74	74	---	190	190
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	---	---	0	---	19	19	---	25	25
IAND-NA	---	---	0	---	19	19	---	25	25
INDUSTRY TRADE AND COMMERCE									
ITC	1,158	---	1,158	---	---	0	---	---	0
ITC-TI	1,158	---	1,158	---	---	0	---	---	0
JUSTICE									
JUST	219	---	219	418	---	418	1,292	---	1,292
JUST-ADM	219	---	219	418	---	418	1,292	---	1,292
LABOUR									
NATIONAL DEFENCE									
NDEF	120	---	120	150	---	150	207	---	207
NDEF-SER	120	---	120	150	---	150	207	---	207
NATIONAL HEALTH AND WELFARE									
NHW	350	1,619	1,969	242	2,145	2,387	274	2,126	2,400
NHW-ADM	---	1,570	1,570	---	2,070	2,070	---	2,070	2,070
NHW-HSS	350	47	397	242	74	316	274	55	329
NHW-HP	---	2	2	---	1	1	---	1	1
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	---	---	0	---	---	0	40	---	40
PW-PTS	---	---	0	---	---	0	40	---	40
CMHC	53	12	65	90	63	153	90	70	160
NCC	10	---	10	11	---	11	10	---	10
REGIONAL ECONOMIC EXPANSION									
REE	---	966	966	---	1,166	1,166	---	5,797	5,797
SCIENCE AND TECHNOLOGY									
NRC	68	---	68	677	---	677	759	---	759
NRC-SIR	68	---	68	677	---	677	759	---	759
SECRETARY OF STATE									
SOLICITOR GENERAL									
SGEN	100	20	120	138	---	138	138	---	138
SGEN-ADM	100	20	120	138	---	138	138	---	138
SUPPLY AND SERVICES									
TRANSPORT									
TPT	3	92	95	---	237	237	---	283	283
TPT-ADM	3	92	95	---	237	237	---	283	283
TREASURY BOARD									
TOTAL	33,850	12,709	46,559	48,361	14,302	62,663	60,008	19,965	79,973

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

FOREIGN, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	29	4	33	688	4	692	609	4	613
AGR-DEV	29	---	29	688	---	688	609	---	609
AGR-CGC	---	4	4	---	4	4	---	4	4
COMMUNICATIONS									
COMM	1,589	---	1,589	3,267	---	3,267	---	---	0
COMM-COMM	1,589	---	1,589	3,267	---	3,267	---	---	0
NLIB	---	20	20	---	73	73	---	46	46
SSHRC	---	2,611	2,611	---	3,100	3,100	---	3,489	3,489
CONSUMER AND CORPORATE AFFAIRS									
CCA	38	---	38	43	---	43	47	---	47
CCA-ADM	---	---	0	43	---	43	47	---	47
CCA-CON	38	---	38	---	---	0	---	---	0
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
EI	20	---	20	---	---	0	---	---	0
EI-ADM	20	---	20	---	---	0	---	---	0
CEIC	---	39	39	---	23	23	---	---	0
ENERGY MINES & RESOURCES									
EMR	1,353	32	1,385	1,229	22	1,251	2,930	22	2,952
EMR-ENER	289	15	304	---	---	0	---	---	0
EMR-MES	1,064	17	1,081	1,229	22	1,251	2,930	22	2,952
AECL	259	---	259	586	---	586	554	---	554
ENVIRONMENT									
ENV	265	592	857	188	618	806	213	620	833
ENV-ES	265	592	857	188	618	806	213	620	833
ENV-EPS	122	---	122	15	---	15	15	---	15
ENV-AES	21	567	588	---	590	590	---	590	590
ENV-ECS	14	25	39	15	28	43	18	30	48
ENV-FOR	108	---	108	158	---	158	180	---	180
EXTERNAL AFFAIRS									
EA	---	132	132	---	142	142	---	156	156
EA-CIA	---	132	132	---	142	142	---	156	156
CIDA	9,324	258	9,582	10,479	283	10,762	11,975	312	12,287
IDRC	25,024	1,725	26,749	27,973	2,378	30,351	33,633	2,904	36,537
FINANCE									
FISHERIES AND OCEANS									
F&O	90	---	90	29	---	29	64	---	64
F&O-FM	90	---	90	29	---	29	64	---	64
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
INDUSTRY TRADE AND COMMERCE									
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NDEF	2,770	---	2,770	1,972	---	1,972	2,573	---	2,573
NDEF-SER	2,770	---	2,770	1,972	---	1,972	2,573	---	2,573
NATIONAL HEALTH AND WELFARE									
NHW	588	62	650	2,049	92	2,141	963	155	1,118
NHW-HSS	132	62	194	155	92	247	125	155	280
NHW-MS	341	---	341	1,000	---	1,000	---	---	0
NHW-HP	115	---	115	894	---	894	838	---	838
MRC	2,812	31	2,843	3,177	39	3,216	3,580	44	3,624
NATIONAL REVENUE									
PRIVY COUNCIL									
ECC	30	---	30	25	---	25	15	---	15
PUBLIC WORKS									
PW	5	110	115	---	115	115	---	2	2
PW-PTS	5	110	115	---	115	115	---	2	2
CMHC	---	341	341	---	505	505	---	500	500
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
ST	1,358	528	1,886	1,553	485	2,038	1,895	534	2,429
NRC	1,965	---	1,965	2,249	---	2,249	2,722	---	2,722
NRC-SIR	1,965	---	1,965	2,249	---	2,249	2,722	---	2,722
NSERC	1,516	1,711	3,227	1,820	2,076	3,896	1,987	2,321	4,308
SC	7	---	7	12	---	12	14	---	14
SECRETARY OF STATE									
SOLICITOR GENERAL									
SGEN	---	50	50	---	50	50	---	50	50
SGEN-ADM	---	50	50	---	50	50	---	50	50
SUPPLY AND SERVICES									
STCAN	---	81	81	---	121	121	---	109	109
TRANSPORT									
TPT	74	3	77	---	3	3	---	---	0
TPT-ADM	---	3	3	---	3	3	---	---	0
TPT-MAR	74	---	74	---	---	0	---	---	0
CTC	25	---	25	25	---	25	25	---	25
TREASURY BOARD									
TOTAL	49,141	8,330	57,471	57,364	10,129	67,493	63,799	11,268	75,067

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

OTHER, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	---	1,741	1,741	---	917	917	---	---	0
AGR-DEV	---	1,741	1,741	---	917	917	---	---	0
CLFB	17	---	17	10	---	10	20	---	20
COMMUNICATIONS									
COMM	---	14	14	---	---	0	---	---	0
COMM-COMM	---	14	14	---	---	0	---	---	0
CRTC	34	---	34	85	---	85	75	---	75
NMUS	278	1,192	1,470	301	1,223	1,524	219	1,221	1,440
CONSUMER AND CORPORATE AFFAIRS									
CCA	381	81	462	493	215	708	502	330	832
CCA-ADM	---	---	0	458	---	458	502	---	502
CCA-CON	375	---	375	---	---	0	---	---	0
CCA-COR	6	---	6	---	---	0	---	---	0
CCA-CICP	---	81	81	35	215	250	---	330	330
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
CEIC	---	1,427	1,427	---	---	0	---	---	0
ENERGY MINES & RESOURCES									
EMR	1,060	63	1,123	1,932	37	1,969	2,334	37	2,371
EMR-MES	1,060	63	1,123	1,932	37	1,969	2,334	37	2,371
AECB	20	---	20	49	---	49	80	---	80
AECL	334	---	334	130	---	130	139	---	139
NEB	---	12	12	---	33	33	---	---	0
ENVIRONMENT									
ENV	512	2,454	2,966	778	2,672	3,450	880	2,726	3,606
ENV-ES	389	2,385	2,774	643	2,596	3,239	729	2,641	3,370
ENV-EPS	57	40	97	285	47	332	285	47	332
ENV-AES	121	1,849	1,970	99	2,002	2,101	109	1,988	2,097
ENV-ECS	207	496	703	245	547	792	269	606	875
ENV-FOR	4	---	4	14	---	14	66	---	66
ENV-PC	123	69	192	135	76	211	151	85	236
EXTERNAL AFFAIRS									
IDRC	318	149	467	265	125	390	322	153	475
IJC	---	79	79	---	114	114	---	202	202
FINANCE									
FISHERIES AND OCEANS									
F&O	330	423	753	343	854	1,197	424	1,009	1,433
F&O-FM	330	423	753	343	854	1,197	424	1,009	1,433
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	238	20	258	129	300	429	52	320	372
IAND-IIA	---	---	0	---	300	300	---	300	300
IAND-NA	238	20	258	129	---	129	52	20	72
INDUSTRY TRADE AND COMMERCE									
ITC	312	---	312	143	---	143	143	---	143
ITC-TI	312	---	312	143	---	143	143	---	143
JUSTICE									
JUST	443	179	622	891	206	1,097	1,315	325	1,640
JUST-ADM	443	179	622	891	206	1,097	1,315	325	1,640
LRC	667	---	667	1,073	---	1,073	1,231	---	1,231
LABOUR									
LAB	7	55	62	8	60	68	9	68	77
NATIONAL DEFENCE									
NDEF	74	---	74	69	---	69	86	---	86
NDEF-SER	74	---	74	69	---	69	86	---	86
NATIONAL HEALTH AND WELFARE									
NHW	270	123	393	454	131	585	560	183	743
NHW-HSS	8	100	108	11	117	128	---	167	167
NHW-HP	262	23	285	443	14	457	560	16	576
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	---	97	97	---	29	29	---	---	0
PW-PTS	---	97	97	---	29	29	---	---	0
CMHC	39	217	256	60	339	399	60	366	426
NCC	---	5	5	5	---	5	---	---	0
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
ST	---	2	2	---	1	1	---	1	1
NRC	639	1,139	1,778	3,381	531	3,912	3,460	885	4,345
NRC-SIR	639	1,139	1,778	3,381	531	3,912	3,460	885	4,345
SC	179	---	179	262	---	262	300	---	300
SECRETARY OF STATE									
SECS	568	422	990	568	306	874	568	306	874
SECS-OL	---	---	0	---	16	16	---	16	16
SECS-TRA	---	172	172	---	290	290	---	290	290
SECS-CIT	568	250	818	568	---	568	568	---	568
SOLICITOR GENERAL									
SGEN	---	225	225	---	1,119	1,119	---	619	619
SGEN-ADM	---	225	225	---	1,119	1,119	---	619	619
SUPPLY AND SERVICES									
SS	442	111	553	542	60	602	540	60	600
SS-SUPP	442	111	553	542	60	602	540	60	600
STCAN	---	9	9	---	---	0	---	---	0
TRANSPORT									
TPT	142	96	238	93	241	334	74	268	342
TPT-ADM	131	66	197	68	211	279	74	238	312
TPT-MAR	---	20	20	---	20	20	---	20	20
TPT-SUR	11	10	21	25	10	35	---	10	10
TREASURY BOARD									
TOTAL	7,304	10,335	17,639	12,064	9,513	21,577	13,393	9,079	22,472

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON RESEARCH AND DEVELOPMENT BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	705,170	(52.8)	818,445	(49.8)	968,116	(50.6)
INDUSTRY	240,468	(18.0)	341,917	(20.8)	394,361	(20.6)
UNIVERSITIES	284,587	(21.3)	347,278	(21.1)	393,577	(20.6)
NON-PROFIT INSTITUTIONS	14,572	(1.1)	17,908	(1.1)	21,448	(1.1)
PROVINCIAL & MUNICIPAL	33,850	(2.5)	48,361	(2.9)	60,088	(3.1)
FOREIGN	49,141	(3.7)	57,364	(3.5)	63,799	(3.3)
OTHER CANADIAN	7,304	(0.5)	12,064	(0.7)	13,393	(0.7)
TOTAL	1,335,092	(100.0)	1,643,337	(100.0)	1,914,702	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES
BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	645,813	(82.1)	799,959	(83.2)	840,545	(81.9)
INDUSTRY	65,631	(8.3)	75,140	(7.8)	88,583	(8.6)
UNIVERSITIES	35,369	(4.5)	43,067	(4.5)	47,588	(4.6)
NON-PROFIT INSTITUTIONS	7,975	(1.0)	9,076	(0.9)	9,709	(0.9)
PROVINCIAL & MUNICIPAL	12,709	(1.6)	14,302	(1.5)	19,965	(1.9)
FOREIGN	8,330	(1.1)	10,129	(1.1)	11,268	(1.1)
OTHER CANADIAN	10,335	(1.3)	9,513	(1.0)	9,079	(0.9)
TOTAL	786,162	(100.0)	961,186	(100.0)	1,026,737	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RESEARCH AND DEVELOPMENT

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	133,972	8,930	142,902	148,842	9,618	158,460	174,127	11,926	186,053
AGR-ADM	---	---	---	---	---	---	---	---	---
AGR-DEV	128,032	8,930	136,962	142,086	9,618	151,704	164,229	11,926	176,155
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	1,350	---	1,350	1,653	---	1,653	1,917	---	1,917
CDC	---	---	---	---	---	---	---	---	---
CLFB	51	20	71	61	10	71	77	40	117
COMMUNICATIONS									
COMM	41,740	18,954	60,694	49,669	27,114	76,783	51,905	9,985	61,890
COMM-COMM	41,740	18,954	60,694	49,669	27,114	76,783	51,905	9,985	61,890
COMM-AC	---	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---	---
CRTC	534	68	602	519	160	679	569	250	819
NFB	382	---	382	427	---	427	497	---	497
NLIB	---	---	---	---	---	---	---	---	---
NMUS	2,613	278	2,891	5,458	301	5,759	6,198	219	6,417
PA	---	---	---	---	---	---	---	---	---
SSHRC	2,054	23,514	25,568	2,269	25,605	27,874	2,998	32,728	35,726
CONSUMER AND CORPORATE AFFAIRS									
CCA	2,020	642	2,662	2,601	1,022	3,623	3,543	1,094	4,637
CCA-ADM	---	---	---	2,045	987	3,032	2,761	1,094	3,855
CCA-CON	852	559	1,411	---	---	---	---	---	---
CCA-COR	705	83	788	---	---	---	---	---	---
CCA-CICP	463	---	463	556	35	591	782	---	782
ECONOMIC DEVELOPMENT									
ED	---	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION									
EI	1,465	63	1,528	1,428	49	1,477	1,518	50	1,568
EI-ADM	1,465	63	1,528	1,428	49	1,477	1,518	50	1,568
CEIC	---	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES									
EMR	72,902	57,143	130,045	91,682	82,555	174,237	119,151	95,321	214,472
EMR-ENER	420	45,431	45,851	1,045	64,706	65,751	3,184	71,975	75,159
EMR-MES	72,482	11,712	84,194	90,637	17,849	108,486	115,967	23,346	139,313
AECB	240	535	775	270	829	1,099	311	1,760	2,071
AECL	68,819	10,029	78,848	82,431	13,771	96,202	95,428	15,077	110,505
NEB	---	---	---	---	---	---	---	---	---
ENVIRONMENT									
ENV	67,927	20,249	88,176	78,901	22,502	101,403	97,757	22,911	120,668
ENV-ADM	399	---	399	432	---	432	475	---	475
ENV-ES	67,419	19,892	87,311	78,350	22,110	100,460	97,150	22,472	119,622
ENV-EPS	2,306	3,082	5,388	2,398	2,950	5,348	2,923	4,185	7,108
ENV-AES	18,091	769	18,860	21,796	831	22,627	25,923	884	26,807
ENV-ECS	16,229	1,304	17,533	17,572	1,463	19,035	20,268	1,620	21,888
ENV-FOR	30,793	14,737	45,530	36,584	16,866	53,450	48,036	15,783	63,819
ENV-PC	109	357	466	119	392	511	132	439	571
EXTERNAL AFFAIRS									
EA	---	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---	---
CIDA	370	9,674	10,044	436	10,879	11,315	471	12,375	12,846
IDRC	7,298	25,872	33,170	8,655	29,182	37,837	10,702	35,882	46,584
IJC	---	---	---	---	---	---	---	---	---
FINANCE									
FIN	---	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS									
F&O	51,034	6,475	57,509	55,725	8,286	64,011	54,054	10,859	64,913
F&O-FM	51,034	6,475	57,509	55,725	8,286	64,011	54,054	10,859	64,913
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	2,013	1,410	3,423	2,296	1,452	3,748	2,332	1,826	4,158
IAND-IIA	---	---	---	2	---	2	13	---	13
IAND-NA	2,013	1,410	3,423	2,294	1,452	3,746	2,319	1,826	4,145
INDUSTRY TRADE AND COMMERCE									
ITC	6,338	87,851	94,189	7,183	132,160	139,343	8,681	159,947	168,628
ITC-TI	6,197	86,517	92,714	7,028	130,906	137,934	8,521	158,776	167,297
ITC-TOUR	91	156	247	100	171	271	100	171	271
ITC-GO	50	1,178	1,228	55	1,083	1,138	60	1,000	1,060

TABLE 15 CONT'D

NATURAL AND HUMAN SCIENCES

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RESEARCH AND DEVELOPMENT

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	677	1,273	1,950	1,013	2,009	3,022	1,825	3,027	4,852
JUST-ADM	677	1,273	1,950	1,013	2,009	3,022	1,825	3,027	4,852
JUST-CUIO	---	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---	---
LRC	246	667	913	387	1,080	1,467	511	1,239	1,750
LABOUR									
LAB	411	192	603	452	210	662	509	236	745
NATIONAL DEFENCE									
NDEF	71,752	28,741	100,493	73,515	36,109	109,624	81,938	54,985	136,923
NDEF-SER	71,752	28,741	100,493	73,515	36,109	109,624	81,938	54,985	136,923
NATIONAL HEALTH AND WELFARE									
NHW	14,556	13,012	27,568	16,635	15,169	31,804	18,346	14,229	32,575
NHW-ADM	1,527	150	1,677	1,996	165	2,161	2,337	185	2,522
NHW-HSS	938	11,638	12,576	1,071	12,237	13,308	1,109	11,386	12,495
NHW-MS	1,745	341	2,086	2,918	1,000	3,918	2,167	---	2,167
NHW-HP	10,346	883	11,229	10,650	1,767	12,417	12,733	2,658	15,391
NHW-IS	---	---	---	---	---	---	---	---	---
MRC	1,435	78,026	79,461	1,618	95,231	96,849	1,821	107,325	109,146
NATIONAL REVENUE									
NREV	827	---	827	828	---	828	796	---	796
NREV-TAX	827	---	827	828	---	828	796	---	796
PRIVY COUNCIL									
PC	---	549	549	---	589	589	---	89	89
COL	---	---	---	---	---	---	---	---	---
ECC	6,486	533	7,019	5,950	490	6,440	6,319	495	6,814
PUBLIC WORKS									
PW	1,318	2,942	4,260	353	1,055	1,408	777	1,603	2,380
PW-PTS	1,318	2,942	4,260	353	1,055	1,408	777	1,603	2,380
CMHC	3,000	1,573	4,573	3,550	2,497	6,047	3,890	2,605	6,495
NCC	---	10	10	---	16	16	---	10	10
REGIONAL ECONOMIC EXPANSION									
REE	820	52	872	1,011	60	1,071	1,198	60	1,258
SCIENCE AND TECHNOLOGY									
ST	---	1,358	1,358	---	1,553	1,553	---	1,895	1,895
NRC	126,182	63,795	189,977	153,342	101,655	254,997	194,891	117,557	312,448
NRC-SIR	126,182	63,795	189,977	153,342	101,655	254,997	194,891	117,557	312,448
NRC-STI	---	---	---	---	---	---	---	---	---
NSERC	2,677	143,561	146,238	3,450	176,573	180,023	4,548	197,936	202,484
SC	1,112	386	1,498	1,307	605	1,912	1,511	690	2,201
SECRETARY OF STATE									
SECS	2,378	3,467	5,845	2,950	3,042	5,992	2,608	3,807	6,415
SECS-OL	---	480	480	---	509	509	---	724	724
SECS-ES	---	---	---	---	---	---	---	---	---
SECS-TRA	2,378	490	2,868	2,950	250	3,200	2,608	500	3,108
SECS-CIT	---	2,497	2,497	---	2,283	2,283	---	2,583	2,583
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	775	1,640	2,415	938	2,075	3,013	938	2,075	3,013
SGEN-ADM	775	1,640	2,415	938	2,075	3,013	938	2,075	3,013
RCMP	---	71	71	150	145	295	150	150	300
SUPPLY AND SERVICES									
SS	88	12,295	12,383	97	12,477	12,574	106	12,477	12,583
SS-SUPP	88	12,295	12,383	97	12,477	12,574	106	12,477	12,583
STCAN	5,828	---	5,828	8,108	---	8,108	9,324	---	9,324
TRANSPORT									
TPT	1,691	3,659	5,350	2,846	6,274	9,120	4,429	11,348	15,777
TPT-ADM	696	2,904	3,600	1,223	4,361	5,584	1,192	4,877	6,069
TPT-MAR	602	719	1,321	945	1,864	2,809	2,024	6,421	8,445
TPT-AIR	303	---	303	583	---	583	1,048	---	1,048
TPT-SUR	90	36	126	95	49	144	165	50	215
CTC	1,139	300	1,439	1,092	370	1,462	1,362	370	1,732
TREASURY BOARD									
TB	---	113	113	---	113	113	---	128	128
TB-ADM	---	113	113	---	113	113	---	128	128
TOTAL	785,170	629,922	1,335,092	818,445	824,892	1,643,337	968,116	946,586	1,914,702

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT IN CANADIAN INDUSTRY BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
AGRICULTURE						
AGR	---	3,060	---	3,764	---	5,082
AGR-ADM	---	---	---	---	---	---
AGR-DEV	---	3,060	---	3,764	---	5,082
AGR-RI	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---
CDC	---	---	---	---	---	---
CLFB	---	---	---	---	---	20
COMMUNICATIONS						
COMM	9,424	6,966	12,452	10,370	2,865	6,160
COMM-COMM	9,424	6,966	12,452	10,370	2,865	6,160
COMM-AC	---	---	---	---	---	---
CBC	---	---	---	---	---	---
CRTC	---	---	---	---	---	50
NFB	---	---	---	---	---	---
NLIB	---	---	---	---	---	---
NMUS	---	---	---	---	---	---
PA	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS						
CCA	---	122	---	209	---	233
CCA-ADM	---	---	---	209	---	233
CCA-CON	---	99	---	---	---	---
CCA-COR	---	23	---	---	---	---
CCA-CICP	---	---	---	---	---	---
ECONOMIC DEVELOPMENT						
ED	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION						
EI	---	7	---	49	---	50
EI-ADM	---	7	---	49	---	50
CEIC	---	---	---	---	---	---
ENERGY MINES & RESOURCES						
EMR	16,274	4,929	16,302	10,827	11,637	14,417
EMR-ENER	16,274	331	16,302	2,281	11,637	3,848
EMR-MES	---	4,598	---	8,546	---	10,569
AECB	---	270	---	411	---	1,100
AECL	---	7,655	---	11,155	---	12,248
NEB	---	---	---	---	---	---
ENVIRONMENT						
ENV	3,600	9,656	3,600	10,531	2,300	9,986
ENV-ADM	---	---	---	---	---	---
ENV-ES	3,600	9,500	3,600	10,359	2,300	9,793
ENV-EPS	---	2,102	---	2,200	---	3,435
ENV-AES	---	---	---	---	---	---
ENV-ECS	---	198	---	208	---	258
ENV-FOR	3,600	7,200	3,600	7,951	2,300	6,100
ENV-PC	---	156	---	172	---	193
EXTERNAL AFFAIRS						
EA	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---
CIDA	---	---	---	---	---	---
IDRC	---	---	---	---	---	---
IJC	---	---	---	---	---	---
FINANCE						
FIN	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---
FISHERIES AND OCEANS						
F&O	---	3,350	---	5,238	---	7,092
F&O-FM	---	3,350	---	5,238	---	7,092
INDIAN AFFAIRS & NORTHERN DEVELOPMENT						
IAND	184	238	---	261	---	588
IAND-IIA	---	---	---	---	---	---
IAND-NA	184	238	---	261	---	588
INDUSTRY TRADE AND COMMERCE						
ITC	84,184	156	128,095	171	155,883	171
ITC-TI	83,416	---	127,413	---	155,283	---
ITC-TOUR	---	156	---	171	---	171
ITC-GO	768	---	682	---	600	---

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT

IN CANADIAN INDUSTRY

BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
JUSTICE						
JUST	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---
CHRC	---	---	---	---	---	---
LRC	---	---	---	---	---	---
LABOUR						
LAB	35	10	38	11	43	12
NATIONAL DEFENCE						
NDEF	---	22,972	---	29,708	---	47,093
NDEF-SER	---	22,972	---	29,708	---	47,093
NATIONAL HEALTH AND WELFARE						
NHW	48	173	75	245	75	340
NHW-ADM	---	---	---	---	---	---
NHW-HSS	48	158	75	142	75	195
NHW-MS	---	---	---	---	---	---
NHW-HP	---	15	---	103	---	145
NHW-IS	---	---	---	---	---	---
MRC	---	---	---	---	---	---
NATIONAL REVENUE						
NREV	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---
PRIVY COUNCIL						
PC	---	---	---	---	---	---
COL	---	---	---	---	---	---
ECC	---	296	---	300	---	300
PUBLIC WORKS						
PW	---	2,937	---	1,045	---	1,553
PW-PTS	---	2,937	---	1,045	---	1,553
CMHC	48	1,297	75	2,075	75	2,170
NCC	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION						
REE	---	52	---	60	---	60
SCIENCE AND TECHNOLOGY						
ST	---	---	---	---	---	---
NRC	22,088	23,932	35,460	38,630	45,652	40,123
NRC-SIR	22,088	23,932	35,460	38,630	45,652	40,123
NRC-STI	---	---	---	---	---	---
NSERC	---	---	---	---	---	---
SC	---	152	---	247	---	282
SECRETARY OF STATE						
SECS	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---
PSC	---	---	---	---	---	---
SOLICITOR GENERAL						
SGEN	---	635	---	833	---	850
SGEN-ADM	---	635	---	833	---	850
RCMP	---	42	---	60	---	90
SUPPLY AND SERVICES						
SS	---	10,647	---	10,765	---	10,767
SS-SUPP	---	10,647	---	10,765	---	10,767
STCAN	---	---	---	---	---	---
TRANSPORT						
TPT	---	3,240	---	5,816	---	10,849
TPT-ADM	---	2,595	---	3,952	---	4,428
TPT-MAR	---	645	---	1,864	---	6,421
TPT-AIR	---	---	---	---	---	---
TPT-SUR	---	---	---	---	---	---
CTC	---	150	---	200	---	200
TREASURY BOARD						
TB	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---
TOTAL	135,885	102,944	196,097	142,981	218,530	171,886

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT IN CANADIAN UNIVERSITIES AND NON-PROFIT INSTITUTIONS BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
AGRICULTURE						
AGR	1,373	2,776	1,386	3,485	1,386	4,849
AGR-ADM	---	---	---	---	---	---
AGR-DEV	1,373	2,776	1,386	3,485	1,386	4,849
AGR-RI	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---
CDC	---	---	---	---	---	---
CLFB	---	3	---	---	---	---
COMMUNICATIONS						
COMM	25	950	25	1,000	25	935
COMM-COMM	25	950	25	1,000	25	935
COMM-AC	---	---	---	---	---	---
CBC	---	---	---	---	---	---
CRTC	34	---	75	---	100	25
NFB	---	---	---	---	---	---
NLIB	---	---	---	---	---	---
NMUS	---	---	---	---	---	---
PA	---	---	---	---	---	---
SSHRC	18,235	---	19,700	---	26,085	---
CONSUMER AND CORPORATE AFFAIRS						
CCA	---	85	---	258	---	291
CCA-ADM	---	---	---	258	---	291
CCA-CON	---	31	---	---	---	---
CCA-COR	---	54	---	---	---	---
CCA-CICP	---	---	---	---	---	---
ECONOMIC DEVELOPMENT						
ED	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION						
EI	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---
CEIC	---	---	---	---	---	---
ENERGY MINES & RESOURCES						
EMR	2,127	1,627	3,355	2,889	4,082	3,036
EMR-ENER	191	41	1,840	---	2,240	---
EMR-MES	1,936	1,586	1,515	2,889	1,842	3,036
AECB	---	222	---	369	---	560
AECL	---	1,781	---	1,900	---	2,136
NEB	---	---	---	---	---	---
ENVIRONMENT						
ENV	897	5,090	1,326	5,779	2,278	6,982
ENV-ADM	---	---	---	---	---	---
ENV-ES	897	5,013	1,326	5,695	2,278	6,888
ENV-EPS	---	751	---	390	---	390
ENV-AES	283	344	300	432	300	475
ENV-ECS	247	580	234	662	234	733
ENV-FOR	367	3,338	792	4,211	1,744	5,290
ENV-PC	---	77	---	84	---	94
EXTERNAL AFFAIRS						
EA	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---
CIDA	---	---	---	---	---	---
IDRC	530	---	944	---	1,927	---
IJC	---	---	---	---	---	---
FINANCE						
FIN	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---
FISHERIES AND OCEANS						
F&O	585	2,060	510	2,166	510	2,769
F&O-FM	585	2,060	510	2,166	510	2,769
INDIAN AFFAIRS & NORTHERN DEVELOPMENT						
IAND	397	353	697	365	802	384
IAND-IIA	---	---	---	---	---	---
IAND-NA	397	353	697	365	802	384
INDUSTRY TRADE AND COMMERCE						
ITC	2,041	---	3,751	---	3,750	---
ITC-TI	1,631	---	3,350	---	3,350	---
ITC-TOUR	---	---	---	---	---	---
ITC-GO	410	---	401	---	400	---

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT

IN CANADIAN UNIVERSITIES AND NON-PROFIT INSTITUTIONS

BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
JUSTICE						
JUST	611	---	700	---	420	---
JUST-ADM	611	---	700	---	420	---
JUST-CUIO	---	---	---	---	---	---
CHRC	---	---	---	---	---	---
LRC	---	---	---	7	---	8
LABOUR						
LAB	75	65	82	71	92	80
NATIONAL DEFENCE						
NDEF	---	2,805	---	4,210	---	5,026
NDEF-SER	---	2,805	---	4,210	---	5,026
NATIONAL HEALTH AND WELFARE						
NHW	10,714	503	11,492	346	10,547	1,206
NHW-ADM	150	---	165	---	185	---
NHW-HSS	10,542	34	11,312	34	10,347	106
NHW-MS	---	---	---	---	---	---
NHW-HP	22	469	15	312	15	1,100
NHW-IS	---	---	---	---	---	---
MRC	72,216	---	88,092	---	99,280	---
NATIONAL REVENUE						
NREV	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---
PRIVY COUNCIL						
PC	549	---	589	---	89	---
COL	---	---	---	---	---	---
ECC	---	207	---	165	---	180
PUBLIC WORKS						
PW	---	---	---	10	---	10
PW-PTS	---	---	---	10	---	10
CMHC	23	113	42	155	55	155
NCC	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION						
REE	---	---	---	---	---	---
SCIENCE AND TECHNOLOGY						
ST	---	---	---	---	---	---
NRC	13,642	1,461	18,199	3,059	22,201	2,640
NRC-SIR	13,642	1,461	18,199	3,059	22,201	2,640
NRC-STI	---	---	---	---	---	---
NSERC	138,333	---	166,551	---	184,562	---
SC	---	48	---	84	---	94
SECRETARY OF STATE						
SECS	2,409	490	2,224	250	2,739	500
SECS-OL	480	---	509	---	724	---
SECS-ES	---	---	---	---	---	---
SECS-TRA	---	490	---	250	---	500
SECS-CIT	1,929	---	1,715	---	2,015	---
PSC	---	---	---	---	---	---
SOLICITOR GENERAL						
SGEN	340	565	375	729	375	712
SGEN-ADM	340	565	375	729	375	712
RCMP	---	29	---	85	---	60
SUPPLY AND SERVICES						
SS	---	1,206	---	1,170	---	1,170
SS-SUPP	---	1,206	---	1,170	---	1,170
STCAN	---	---	---	---	---	---
TRANSPORT						
TPT	25	175	24	341	50	375
TPT-ADM	---	175	---	341	---	375
TPT-MAR	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---
TPT-SUR	25	---	24	---	50	---
CTC	---	125	---	145	---	145
TREASURY BOARD						
TB	113	---	113	---	128	---
TB-ADM	113	---	113	---	128	---
TOTAL	265,294	22,739	320,252	29,038	361,483	34,328

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	7,722	1,745	9,467	9,103	959	10,062	9,949	67	10,016
AGR-ADM	4,200	---	4,200	4,783	---	4,783	5,084	---	5,084
AGR-DEV	1,993	1,741	3,734	2,462	955	3,417	2,596	63	2,659
AGR-RI	---	---	---	---	---	---	---	---	---
AGR-CGC	1,529	4	1,533	1,858	4	1,862	2,269	4	2,273
CDC	---	598	598	---	2,200	2,200	---	2,500	2,500
CLFB	18	---	18	21	---	21	23	5	28
COMMUNICATIONS									
COMM	4,222	1,063	5,285	4,291	1,209	5,500	4,426	1,225	5,651
COMM-COMM	3,837	791	4,628	3,742	775	4,517	3,976	860	4,836
COMM-AC	385	272	657	549	434	983	450	365	815
CBC	1,738	1,898	3,636	1,867	2,175	4,042	2,123	2,484	4,607
CRTC	---	---	---	---	---	---	---	---	---
NFB	252	---	252	176	---	176	200	---	200
NLIB	17,225	20	17,245	21,536	73	21,609	25,796	46	25,842
NMUS	41,473	9,651	51,124	42,943	9,953	52,896	44,657	10,719	55,376
PA	10,817	---	10,817	11,960	---	11,960	13,689	---	13,689
SSHRC	1,948	14,862	16,810	2,182	16,545	18,727	2,330	18,620	20,950
CONSUMER AND CORPORATE AFFAIRS									
CCA	14,601	161	14,762	15,030	465	15,495	17,908	630	18,538
CCA-ADM	---	---	---	---	---	---	---	---	---
CCA-CON	2,170	---	2,170	2,435	---	2,435	2,850	---	2,850
CCA-COR	12,375	---	12,375	12,537	---	12,537	14,881	---	14,881
CCA-CICP	56	161	217	58	465	523	177	630	807
ECONOMIC DEVELOPMENT									
ED	1,527	150	1,677	1,888	150	2,038	2,343	150	2,493
EMPLOYMENT & IMMIGRATION									
EI	7,173	828	8,001	7,305	820	8,125	7,754	858	8,612
EI-ADM	7,173	828	8,001	7,305	820	8,125	7,754	858	8,612
CEIC	4,573	3,185	7,758	8,436	819	9,255	7,326	800	8,126
ENERGY MINES & RESOURCES									
EMR	42,520	6,494	49,014	47,844	7,618	55,462	55,102	10,906	66,008
EMR-ENER	1,819	858	2,677	1,909	2,682	4,591	2,592	3,841	6,433
EMR-MES	40,701	5,636	46,337	45,935	4,936	50,871	52,510	7,065	59,575
AECB	---	---	---	---	---	---	---	---	---
AECL	5,310	12,614	17,924	5,528	12,452	17,980	7,154	14,725	21,879
NEB	1,677	12	1,689	2,143	33	2,176	2,190	---	2,190
ENVIRONMENT									
ENV	149,604	9,370	158,974	167,145	10,470	177,615	202,547	10,888	213,435
ENV-ADM	1,441	---	1,441	1,497	---	1,497	1,645	---	1,645
ENV-ES	136,317	9,070	145,387	152,617	10,139	162,756	186,412	10,520	196,932
ENV-EPS	3,047	325	3,372	2,535	287	2,822	2,605	287	2,892
ENV-AES	93,740	3,233	96,973	107,744	3,736	111,480	134,380	3,563	137,943
ENV-ECS	34,780	5,512	40,292	37,495	6,116	43,611	43,884	6,670	50,554
ENV-FOR	4,750	---	4,750	4,843	---	4,843	5,543	---	5,543
ENV-PC	11,846	300	12,146	13,031	331	13,362	14,490	368	14,858
EXTERNAL AFFAIRS									
EA	4,317	1,612	5,929	4,888	1,762	6,650	5,282	1,938	7,220
EA-CIA	4,317	1,612	5,929	4,888	1,762	6,650	5,282	1,938	7,220
CIDA	1,828	24,619	26,447	1,981	27,079	29,060	2,339	29,789	32,128
IDRC	4,754	1,874	6,628	5,525	2,677	8,202	6,722	3,320	10,042
IJC	2,249	79	2,328	2,657	114	2,771	2,786	202	2,988
FINANCE									
FIN	8,514	---	8,514	10,077	---	10,077	12,613	---	12,613
FIN-FEP	8,514	---	8,514	10,077	---	10,077	12,613	---	12,613
FISHERIES AND OCEANS									
F&O	56,053	2,841	58,894	61,500	4,460	65,960	73,417	7,463	80,880
F&O-FM	56,053	2,841	58,894	61,500	4,460	65,960	73,417	7,463	80,880
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	1,442	92	1,534	1,741	933	2,674	1,870	870	2,740
IAND-IIA	---	---	---	78	300	378	82	300	382
IAND-NA	1,442	92	1,534	1,663	633	2,296	1,788	570	2,358
INDUSTRY TRADE AND COMMERCE									
ITC	98	3,203	3,301	108	4,095	4,203	108	4,578	4,686
ITC-TI	---	3,203	3,203	---	4,095	4,095	---	4,578	4,578
ITC-TOUR	98	---	98	108	---	108	108	---	108
ITC-GO	---	---	---	---	---	---	---	---	---

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	1,820	511	2,331	2,438	552	2,990	2,486	776	3,262
JUST-ADM	268	511	779	338	552	890	386	776	1,162
JUST-CUIO	1,552	---	1,552	2,100	---	2,100	2,100	---	2,100
CHRC	304	---	304	288	---	288	325	---	325
LRC	296	257	553	302	580	882	359	829	1,188
LABOUR									
LAB	3,035	175	3,210	3,338	191	3,529	3,763	216	3,979
NATIONAL DEFENCE									
NDEF	1,953	125	2,078	2,239	163	2,402	2,489	158	2,647
NDEF-SER	1,953	125	2,078	2,239	163	2,402	2,489	158	2,647
NATIONAL HEALTH AND WELFARE									
NHW	30,291	5,953	36,244	33,832	6,978	40,810	40,667	7,669	48,336
NHW-ADM	2,727	1,570	4,297	3,830	2,070	5,900	4,407	2,070	6,477
NHW-HSS	722	3,958	4,680	908	4,527	5,435	911	5,160	6,071
NHW-MS	---	---	---	---	---	---	---	---	---
NHW-HP	26,311	425	26,736	28,482	381	28,863	34,432	439	34,871
NHW-IS	531	---	531	612	---	612	917	---	917
MRC	121	2,449	2,570	139	3,179	3,318	155	3,583	3,738
NATIONAL REVENUE									
NREV	3,659	---	3,659	9,890	---	9,890	6,190	---	6,190
NREV-TAX	3,659	---	3,659	9,890	---	9,890	6,190	---	6,190
PRIVY COUNCIL									
PC	---	---	---	---	---	---	---	---	---
COL	975	---	975	1,172	---	1,172	3,097	---	3,097
ECC	1,811	---	1,811	952	---	952	1,000	---	1,000
PUBLIC WORKS									
PW	2,626	1,424	4,050	5,158	1,091	6,249	4,731	1,027	5,758
PW-PTS	2,626	1,424	4,050	5,158	1,091	6,249	4,731	1,027	5,758
CMHC	5,308	2,699	8,007	5,475	4,293	9,768	5,999	4,392	10,391
NCC	203	39	242	381	190	571	494	130	624
REGIONAL ECONOMIC EXPANSION									
REE	---	1,611	1,611	---	2,216	2,216	---	7,027	7,027
SCIENCE AND TECHNOLOGY									
ST	6,472	532	7,004	7,549	486	8,035	8,382	535	8,917
NRC	33,619	2,506	36,125	40,020	2,357	42,377	45,578	2,666	48,244
NRC-SIR	18,961	2,506	21,467	21,496	2,291	23,787	23,987	2,592	26,579
NRC-STI	14,658	---	14,658	18,524	66	18,590	21,591	74	21,665
NSERC	669	15,964	16,633	862	20,918	21,780	1,138	23,459	24,597
SC	1,392	---	1,392	1,630	---	1,630	1,846	---	1,846
SECRETARY OF STATE									
SECS	2,364	864	3,228	2,774	1,251	4,025	2,845	1,681	4,526
SECS-OL	71	302	373	91	216	307	91	216	307
SECS-ES	139	---	139	415	---	415	465	430	895
SECS-TRA	2,081	172	2,253	2,191	290	2,481	1,937	290	2,227
SECS-CIT	73	390	463	77	745	822	352	745	1,097
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	750	1,010	1,760	872	1,784	2,656	872	1,284	2,156
SGEN-ADM	750	1,010	1,760	872	1,784	2,656	872	1,284	2,156
RCMP	---	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES									
SS	19	2,551	2,570	20	2,523	2,543	22	2,523	2,545
SS-SUPP	19	2,551	2,570	20	2,523	2,543	22	2,523	2,545
STCAN	138,216	90	138,306	221,736	121	221,857	177,786	109	177,895
TRANSPORT									
TPT	7,311	4,490	11,801	7,058	5,185	12,243	2,936	5,237	8,173
TPT-ADM	833	1,653	2,486	1,357	2,472	3,829	1,925	2,630	4,555
TPT-MAR	6,464	728	7,192	5,518	600	6,118	866	600	1,466
TPT-AIR	5	2,099	2,104	157	2,103	2,260	119	1,997	2,116
TPT-SUR	9	10	19	26	10	36	26	10	36
CTC	1,191	128	1,319	1,145	108	1,253	1,415	108	1,523
TREASURY BOARD									
TB	10,553	---	10,553	12,814	---	12,814	15,316	---	15,316
TB-ADM	10,553	---	10,553	12,814	---	12,814	15,316	---	15,316
TOTAL	645,813	140,349	786,162	799,959	161,227	961,186	840,545	186,192	1,026,737

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1980-81

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	5	1,042	123	1,048	433	1,367	---	4,018
AGR-ADM	---	41	21	4	46	---	---	112
AGR-DEV	5	943	100	936	375	1,327	---	3,686
AGR-RI	---	48	1	53	4	30	---	136
AGR-CGC	---	10	1	55	8	2	---	84
CDC	---	---	---	---	---	---	---	---
CLFB	0	1	---	---	1	---	---	2
COMMUNICATIONS								
COMM	17	246	75	152	114	66	---	670
COMM-COMM	17	239	74	152	112	66	---	660
COMM-AC	---	7	1	---	2	---	---	10
CBC	4	19	1	31	2	---	---	57
CRTC	---	2	5	4	6	---	---	17
NFB	---	3	---	8	1	---	---	12
NLIB	2	192	30	46	220	2	---	500
NMUS	8	102	204	201	161	250	---	1,006
PA	---	113	3	60	82	---	---	266
SSHRC	4	2	50	---	49	---	---	105
CONSUMER AND CORPORATE AFFAIRS								
CCA	4	209	21	20	175	3	---	440
CCA-ADM	---	---	---	---	---	---	---	---
CCA-CON	1	25	10	26	10	3	---	75
CCA-COR	2	175	11	2	161	---	---	351
CCA-CICP	1	9	---	---	4	---	---	14
ECONOMIC DEVELOPMENT								
ED	12	9	5	---	7	---	---	33
EMPLOYMENT & IMMIGRATION								
EI	6	80	8	26	61	---	---	181
EI-ADM	6	80	8	26	61	---	---	181
CEIC	---	86	9	11	50	---	---	164
ENERGY MINES & RESOURCES								
EMR	14	903	93	874	356	166	---	2,404
EMR-ENER	3	52	---	---	4	---	---	50
EMR-MES	11	932	93	874	352	166	---	2,426
AECB	---	6	---	---	1	---	---	7
AECL	17	643	---	849	315	570	---	2,394
NEB	1	32	---	6	11	---	---	50
ENVIRONMENT								
ENV	44	1,621	392	2,021	714	123	---	4,915
ENV-ADM	---	15	13	---	24	---	---	51
ENV-ES	44	1,532	373	1,947	657	110	---	4,670
ENV-EPS	2	70	3	55	15	10	---	162
ENV-AES	21	635	171	1,127	350	31	---	2,335
ENV-ECS	0	354	167	256	206	77	---	1,140
ENV-FOR	13	465	32	509	6	---	---	1,025
ENV-PC	---	75	7	74	33	5	---	194
EXTERNAL AFFAIRS								
EA	---	7	64	---	20	---	---	99
EA-CIA	---	7	64	---	20	---	---	99
CIDA	1	0	20	3	17	---	---	57
IDRC	7	71	9	40	04	---	---	210
IJC	7	11	4	3	20	---	---	45
FINANCE								
FIN	9	110	19	24	30	---	---	200
FIN-FEP	9	110	19	24	30	---	---	200
FISHERIES AND OCEANS								
F&O	5	000	90	704	147	249	---	2,143
F&O-FM	5	000	90	704	147	249	---	2,143
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	1	54	0	9	6	4	---	02
IAND-IIA	---	---	---	---	---	---	---	---
IAND-NA	1	54	0	9	6	4	---	02
INDUSTRY TRADE AND COMMERCE								
ITC	---	3	109	---	54	1	---	167
ITC-TI	---	3	104	---	53	---	---	160
ITC-TOUR	---	---	3	---	---	1	---	4
ITC-GO	---	---	2	---	1	---	---	3

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1980-81

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
JUSTICE								
JUST	4	9	9	1	15	---	---	38
JUST-ADM	3	9	3	1	10	---	---	26
JUST-CUIO	1	---	6	---	5	---	---	12
CHRC	---	2	2	---	1	---	---	5
LRC	1	---	4	---	31	---	---	36
LABOUR								
LAB	3	24	30	20	36	---	---	112
NATIONAL DEFENCE								
NDEF	12	551	116	487	248	271	185	1,870
NDEF-SER	12	551	116	487	248	271	185	1,870
NATIONAL HEALTH AND WELFARE								
NHW	13	653	47	365	239	10	---	1,334
NHW-ADM	4	50	5	27	22	---	---	108
NHW-HSS	3	10	10	1	10	---	---	50
NHW-MS	---	27	---	---	6	---	---	33
NHW-HP	7	552	27	333	190	10	---	1,126
NHW-IS	0	6	5	4	3	---	---	17
MRC	5	2	8	---	24	---	---	39
NATIONAL REVENUE								
NREV	2	31	66	4	89	---	---	192
NREV-TAX	2	31	66	4	89	---	---	192
PRIVY COUNCIL								
PC	---	---	---	---	---	---	---	---
COL	1	---	25	---	4	---	---	30
ECC	3	66	20	11	57	---	---	157
PUBLIC WORKS								
PW	---	45	7	9	1	---	---	63
PW-PTS	---	45	7	9	1	---	---	63
CMHC	10	79	3	44	27	---	---	163
NCC	---	4	1	---	---	---	---	5
REGIONAL ECONOMIC EXPANSION								
REE	2	9	3	3	8	---	---	24
SCIENCE AND TECHNOLOGY								
ST	22	11	71	5	50	2	---	161
NRC	5	1,109	207	958	583	296	---	3,158
NRC-SIR	5	1,050	176	957	455	292	---	2,935
NRC-STI	---	59	31	1	128	4	---	223
NSERC	4	1	29	---	41	---	---	75
SC	3	17	18	5	21	---	---	64
SECRETARY OF STATE								
SECS	---	3	134	2	53	---	---	192
SECS-OL	---	1	---	---	---	---	---	1
SECS-ES	---	2	2	---	---	---	---	4
SECS-TRA	---	--	131	---	53	---	---	184
SECS-CIT	---	---	1	2	---	---	---	3
PSC	---	---	---	---	---	---	---	---
SOLICITOR GENERAL								
SGEN	---	26	2	---	10	1	---	39
SGEN-ADM	---	26	2	---	10	1	---	39
RCMP	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES								
SS	0	- -	2	---	2	---	---	4
SS-SUPP	0	- -	2	---	2	---	---	4
STCAN	29	739	769	720	2,303	59	---	4,619
TRANSPORT								
TPT	1	54	14	3	11	---	---	83
TPT-ADM	1	19	10	2	11	---	---	43
TPT-MAR	---	21	---	---	---	---	---	21
TPT-AIR	---	12	4	1	---	---	---	17
TPT-SUR	---	2	---	---	---	---	---	2
CTC	2	41	1	9	15	---	---	68
TREASURY BOARD								
TB	21	11	137	2	48	---	---	219
TB-ADM	21	11	137	2	48	---	---	219
TOTAL	310	10,010	3,000	8,971	7,076	3,440	185	33,000

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1981-82

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	7	1,060	130	1,164	439	1,379	---	4,179
AGR-ADM	---	37	26	7	47	---	---	117
AGR-DEV	6	953	102	1,044	377	1,339	---	3,821
AGR-RI	---	51	1	55	4	38	---	149
AGR-CGC	1	19	1	58	11	2	---	92
CDC	---	---	---	---	---	---	---	---
CLFB	0	1	---	---	1	---	---	2
COMMUNICATIONS								
COMM	17	248	86	149	118	71	---	689
COMM-COMM	17	241	85	149	116	71	---	679
COMM-AC	---	7	1	---	2	---	---	10
CBC	4	19	1	30	2	---	---	56
CRTC	---	2	5	4	5	---	---	16
NFB	---	2	---	7	1	---	---	10
NLIB	2	199	41	39	234	2	---	517
NMUS	9	103	195	270	176	222	---	975
PA	---	117	3	76	81	2	---	279
SSHRC	4	2	50	---	49	---	---	105
CONSUMER AND CORPORATE AFFAIRS								
CCA	5	183	33	31	190	3	---	445
CCA-ADM	2	16	6	5	12	---	---	41
CCA-CON	1	10	8	26	7	3	---	55
CCA-COR	1	148	19	---	167	---	---	335
CCA-CICP	1	9	---	---	4	---	---	14
ECONOMIC DEVELOPMENT								
ED	14	13	4	---	8	---	---	39
EMPLOYMENT & IMMIGRATION								
EI	6	85	8	21	50	---	---	170
EI-ADM	6	85	8	21	50	---	---	170
CEIC	1	94	8	9	45	---	---	157
ENERGY MINES & RESOURCES								
EMR	20	1,002	97	831	352	166	---	2,467
EMR-ENER	4	56	---	---	6	---	---	65
EMR-MES	16	946	97	831	347	166	---	2,402
AECB	---	6	---	---	1	---	---	7
AECL	17	723	---	848	318	606	---	2,512
NEB	1	30	---	6	11	---	---	48
ENVIRONMENT								
ENV	45	1,627	394	2,028	708	123	---	4,924
ENV-ADM	---	15	13	---	19	---	---	47
ENV-ES	45	1,535	374	1,954	655	118	---	4,681
ENV-EPS	2	77	3	55	15	10	---	161
ENV-AES	21	635	171	1,129	348	31	---	2,335
ENV-ECS	8	354	167	256	286	77	---	1,148
ENV-FOR	14	469	33	514	6	---	---	1,037
ENV-PC	---	77	7	74	33	5	---	196
EXTERNAL AFFAIRS								
EA	---	7	64	---	28	---	---	99
EA-CIA	---	7	64	---	28	---	---	99
CIDA	1	4	32	3	17	---	---	57
IDRC	7	85	7	53	87	---	---	239
IJC	7	10	4	4	21	---	---	46
FINANCE								
FIN	11	145	21	24	35	---	---	236
FIN-FEP	11	145	21	24	35	---	---	236
FISHERIES AND OCEANS								
F&O	8	925	89	784	157	310	---	2,273
F&O-FM	8	925	89	784	157	310	---	2,273
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	---	61	9	10	6	4	---	90
IAND-IIA	---	3	---	---	---	---	---	3
IAND-NA	---	58	9	10	6	4	---	87
INDUSTRY TRADE AND COMMERCE								
ITC	---	3	109	---	54	1	---	167
ITC-TI	---	3	104	---	53	---	---	160
ITC-TOUR	---	---	3	---	---	1	---	4
ITC-GO	---	---	2	---	1	---	---	3

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1981-82

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
JUSTICE								
JUST	4	10	8	1	18	---	---	41
JUST-ADM	3	10	2	1	12	---	---	28
JUST-CUIO	1	---	6	---	6	---	---	13
CHRC	---	3	2	---	1	---	---	6
LRC	3	1	5	---	32	---	---	41
LABOUR								
LAB	3	24	31	28	37	---	---	116
NATIONAL DEFENCE								
NDEF	12	564	103	494	244	268	192	1,877
NDEF-SER	12	564	103	494	244	268	192	1,877
NATIONAL HEALTH AND WELFARE								
NHW	19	685	51	369	251	24	---	1,398
NHW-ADM	7	53	6	32	23	---	---	121
NHW-HSS	3	19	12	1	19	---	---	53
NHW-MS	---	27	---	---	6	---	---	33
NHW-HP	9	578	30	334	201	24	---	1,175
NHW-IS	0	8	4	2	2	---	---	16
MRC	5	2	8	---	24	---	---	39
NATIONAL REVENUE								
NREV	1	36	71	2	432	---	---	542
NREV-TAX	1	36	71	2	432	---	---	542
PRIVY COUNCIL								
PC	---	---	---	---	---	---	---	---
COL	1	---	31	---	7	---	---	39
ECC	3	63	25	17	35	---	---	143
PUBLIC WORKS								
PW	---	42	9	9	2	---	---	63
PW-PTS	---	42	9	9	2	---	---	63
CMHC	10	76	3	43	28	---	---	160
NCC	---	3	1	---	---	---	---	4
REGIONAL ECONOMIC EXPANSION								
REE	2	8	3	3	7	---	---	22
SCIENCE AND TECHNOLOGY								
ST	23	11	67	5	53	2	---	161
NRC	5	1,152	211	986	595	299	---	3,248
NRC-SIR	5	1,085	179	985	467	295	---	3,016
NRC-STI	---	67	32	1	128	4	---	232
NSERC	4	1	31	---	45	---	---	81
SC	5	16	18	5	21	---	---	65
SECRETARY OF STATE								
SECS	---	3	129	2	49	---	---	183
SECS-OL	---	1	---	---	---	---	---	1
SECS-ES	---	2	8	---	---	---	---	10
SECS-TRA	---	---	120	---	49	---	---	169
SECS-CIT	---	---	1	2	---	---	---	3
PSC	---	---	---	---	---	---	---	---
SOLICITOR GENERAL								
SGEN	---	26	2	---	10	1	---	39
SGEN-ADM	---	26	2	---	10	1	---	39
RCMP	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES								
SS	0	---	2	---	2	---	---	4
SS-SUPP	0	---	2	---	2	---	---	4
STCAN	31	767	832	766	3,011	82	---	5,489
TRANSPORT								
TPT	1	59	14	4	11	---	---	89
TPT-ADM	1	19	10	2	11	---	---	43
TPT-MAR	---	29	---	---	---	---	---	29
TPT-AIR	---	9	4	2	---	---	---	15
TPT-SUR	---	2	---	---	---	---	---	2
CTC	2	42	1	11	12	---	---	68
TREASURY BOARD								
TB	25	17	146	2	42	---	---	232
TB-ADM	25	17	146	2	42	---	---	232
TOTAL	344	10,367	3,192	9,130	8,163	3,565	192	34,953

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1982-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	32	1,040	109	1,051	422	1,372	---	4,026
AGR-ADM	---	38	31	7	46	---	---	122
AGR-DEV	32	933	76	929	361	1,332	---	3,663
AGR-RI	---	51	1	55	4	38	---	149
AGR-CGC	---	18	1	60	11	2	---	92
CDC	---	---	---	---	---	---	---	---
CLFB	0	1	---	---	1	---	---	2
COMMUNICATIONS								
COMM	17	256	86	160	127	79	---	733
COMM-COMM	17	249	85	168	126	79	---	724
COMM-AC	---	7	1	---	1	---	---	9
CBC	4	19	1	30	2	---	---	56
CRTC	---	1	4	5	5	---	---	15
NFB	---	3	---	8	1	---	---	12
NLIB	2	206	52	40	225	1	---	526
NMUS	11	100	201	263	222	203	---	1,000
PA	1	113	3	79	85	---	---	281
SSHRC	4	2	50	---	49	---	---	105
CONSUMER AND CORPORATE AFFAIRS								
CCA	5	190	35	31	182	3	---	446
CCA-ADM	2	19	5	4	12	---	---	42
CCA-CON	1	10	11	27	6	3	---	58
CCA-COR	1	152	19	---	160	---	---	332
CCA-CICP	1	9	---	---	4	---	---	14
ECONOMIC DEVELOPMENT								
ED	15	14	5	---	9	---	---	43
EMPLOYMENT & IMMIGRATION								
EI	6	85	8	21	50	---	---	170
EI-ADM	6	85	0	21	50	---	---	170
CEIC	1	94	8	9	45	---	---	157
ENERGY MINES & RESOURCES								
EMR	35	1,065	100	862	368	164	---	2,592
EMR-ENER	5	83	---	---	8	---	---	96
EMR-MES	30	982	100	862	360	164	---	2,496
AECB	---	6	---	---	1	---	---	7
AECL	18	736	---	898	342	621	---	2,615
NEB	1	31	---	6	11	---	---	49
ENVIRONMENT								
ENV	41	1,523	431	1,894	829	218	---	4,936
ENV-ADM	---	15	13	---	19	---	---	47
ENV-ES	41	1,432	411	1,820	777	213	---	4,693
ENV-EPS	2	77	4	55	24	10	---	171
ENV-AES	21	640	174	1,130	346	31	---	2,342
ENV-ECS	8	354	167	256	286	77	---	1,148
ENV-FOR	10	361	66	379	121	95	---	1,032
ENV-PC	---	77	7	74	33	5	---	196
EXTERNAL AFFAIRS								
EA	---	7	66	---	28	---	---	101
EA-CIA	---	7	66	---	28	---	---	101
CIDA	1	2	34	3	17	---	---	57
IDRC	7	103	7	51	96	---	---	264
IJC	7	10	6	4	22	---	---	49
FINANCE								
FIN	12	141	21	25	44	---	---	243
FIN-FEP	12	141	21	25	44	---	---	243
FISHERIES AND OCEANS								
F&O	8	960	118	784	204	316	---	2,390
F&O-FM	8	960	118	784	204	316	---	2,390
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	---	63	10	10	6	1	---	90
IAND-IIA	---	3	---	---	---	---	---	3
IAND-NA	---	60	10	10	6	1	---	86
INDUSTRY TRADE AND COMMERCE								
ITC	---	3	119	---	58	1	---	181
ITC-TI	---	3	115	---	57	---	---	175
ITC-TOUR	---	---	3	---	---	1	---	4
ITC-GO	---	---	1	---	1	---	---	2

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1982-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINIS-TRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
JUSTICE								
JUST	5	18	8	1	23	---	---	55
JUST-ADM	4	18	2	1	17	---	---	42
JUST-CUIO	1	---	6	---	6	---	---	13
CHRC	---	2	2	---	1	---	---	5
LRC	3	1	5	---	36	---	---	45
LABOUR								
LAB	3	27	35	23	42	---	---	130
NATIONAL DEFENCE								
NDEF	12	565	103	495	244	268	192	1,878
NDEF-SER	12	565	103	495	244	268	192	1,878
NATIONAL HEALTH AND WELFARE								
NHW	19	713	51	376	259	19	---	1,437
NHW-ADM	7	60	6	32	23	---	---	128
NHW-HSS	3	20	12	1	25	---	---	60
NHW-MS	---	29	---	---	6	---	---	35
NHW-HP	9	593	30	341	203	19	---	1,194
NHW-IS	0	12	4	2	2	---	---	20
MRC	5	2	8	---	24	---	---	39
NATIONAL REVENUE								
NREV	2	44	69	2	122	---	---	239
NREV-TAX	2	44	69	2	122	---	---	239
PRIVY COUNCIL								
PC	---	---	---	---	---	---	---	---
COL	2	---	50	---	11	---	---	63
ECC	3	60	25	17	35	---	---	140
PUBLIC WORKS								
PW	---	40	10	2	7	---	---	59
PW-PTS	---	40	10	2	7	---	---	59
CMHC	10	76	3	43	28	---	---	160
NCC	---	3	---	---	---	---	---	3
REGIONAL ECONOMIC EXPANSION								
REE	2	12	5	3	8	---	---	29
SCIENCE AND TECHNOLOGY								
ST	22	11	69	5	53	1	---	161
NRC	6	1,182	220	1,042	590	301	---	3,341
NRC-SIR	6	1,112	188	1,041	464	296	---	3,107
NRC-STI	---	70	32	1	126	5	---	234
NSERC	4	---	42	---	52	---	---	98
SC	5	16	20	5	19	---	---	65
SECRETARY OF STATE								
SECS	---	4	130	5	49	---	---	188
SECS-OL	---	2	---	---	---	---	---	2
SECS-ES	---	2	8	---	---	---	---	10
SECS-TRA	---	---	120	---	49	---	---	169
SECS-CIT	---	---	2	5	---	---	---	7
PSC	---	---	---	---	---	---	---	---
SOLICITOR GENERAL								
SGEN	---	35	3	---	10	3	---	51
SGEN-ADM	---	35	3	---	10	3	---	51
RCMP	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES								
SS	0	---	2	---	2	---	---	4
SS-SUPP	0	---	2	---	2	---	---	4
STCAN	49	786	751	811	2,142	37	---	4,576
TRANSPORT								
TPT	1	48	14	5	11	---	---	79
TPT-ADM	1	19	10	2	11	---	---	43
TPT-MAR	---	17	---	---	---	---	---	17
TPT-AIR	---	10	4	3	---	---	---	17
TPT-SUR	---	2	---	---	---	---	---	2
CTC	2	42	1	11	12	---	---	68
TREASURY BOARD								
TB	29	18	145	2	44	---	---	238
TB-ADM	29	18	145	2	44	---	---	238
TOTAL	412	10,479	3,244	9,089	7,273	3,607	192	34,296

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	88	5,925	692	4,779	1,739	2,648	163	16,093
INTRAMURAL RSA	192	3,798	2,068	4,146	4,980	771	12	15,887
ADMIN. OF EXTRAMURAL PROGRAMS	30	295	320	46	378	29	10	1,108
TOTAL	310	10,018	3,080	8,971	7,076	3,448	185	33,088
1981-82								
INTRAMURAL R&D	95	6,148	695	4,910	1,800	2,695	171	16,514
INTRAMURAL RSA	217	3,986	2,170	4,169	5,958	839	11	17,269
ADMIN. OF EXTRAMURAL PROGRAMS	33	313	327	52	405	31	10	1,171
TOTAL	344	10,367	3,192	9,130	8,163	3,565	192	34,953
1982-83								
INTRAMURAL R&D	136	6,219	669	4,831	1,934	2,763	171	16,722
INTRAMURAL RSA	242	3,984	2,178	4,197	4,896	811	11	16,239
ADMIN. OF EXTRAMURAL PROGRAMS	34	356	398	62	443	33	10	1,335
TOTAL	412	10,479	3,244	9,089	7,273	3,607	192	34,296

2

Natural Sciences

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES
BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	1,007,477	(60.1)	1,152,860	(56.9)	1,360,767	(57.6)
INDUSTRY	292,634	(17.4)	400,510	(19.8)	464,059	(19.6)
UNIVERSITIES	273,973	(16.3)	338,003	(16.7)	379,430	(16.1)
NON-PROFIT INSTITUTIONS	11,756	(0.7)	15,086	(0.7)	18,859	(0.8)
PROVINCIAL & MUNICIPAL	39,137	(2.3)	54,306	(2.7)	69,632	(2.9)
FOREIGN	42,069	(2.5)	50,981	(2.5)	55,689	(2.4)
OTHER CANADIAN	10,561	(0.6)	13,555	(0.7)	14,064	(0.6)
TOTAL	1,677,607	(100.0)	2,025,301	(100.0)	2,362,500	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES
TOTAL ALL COMPONENTS

FISCAL YEAR 1980-81

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	528,074	0	0	0	0	0	0	528,074
R&D CONTRACTS	67	100,202	16,098	4,785	463	4,260	3,692	129,567
SUPPORTING CONTRACTS	23,704	0	0	0	0	0	0	23,704
R&D GRANTS	0	135,377	232,851	3,799	31,256	29,935	446	433,664
RESEARCH FELLOWSHIPS	1,243	1,639	5,131	0	0	4,636	116	12,765
ADMIN. EXTRAMURAL R&D	24,108	0	0	0	0	0	0	24,108
CAPITAL - R&D	88,138	0	0	0	0	0	0	88,138
SUB TOTAL R&D	665,334	237,218	254,080	8,584	31,719	38,831	4,254	1,240,020
DATA COLLECTION	196,896	11,885	1,872	927	5,083	60	2,194	218,757
INFORMATION SERVICES	71,370	1,609	427	1,192	27	957	1,858	77,440
TESTING & STANDARDIZATION	27,815	1,576	820	277	0	110	148	30,746
FEASIBILITY STUDIES	2,817	39,838	271	278	0	86	1	43,291
EDUCATION SUPPORT	458	270	16,185	20	0	2,025	1,788	20,746
MUSEUM SERVICES	12,140	318	318	478	2,388	0	318	15,960
ADMIN. EXTRAMURAL RSA	5,651	0	0	0	0	0	0	5,651
CAPITAL - RSA	24,996	0	0	0	0	0	0	24,996
SUB TOTAL RSA	342,143	55,416	19,893	3,172	7,418	3,238	6,307	437,587
TOTAL	1,007,477	292,634	273,973	11,756	39,137	42,069	10,561	1,677,607

FISCAL YEAR 1981-82

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	609,844	0	0	0	0	0	0	609,844
R&D CONTRACTS	128	139,298	21,598	5,486	1,162	4,423	4,818	176,905
SUPPORTING CONTRACTS	27,282	0	0	0	0	0	0	27,282
R&D GRANTS	0	195,195	281,727	6,338	44,734	37,418	3,045	568,457
RESEARCH FELLOWSHIPS	1,597	2,839	9,325	0	0	5,142	96	18,999
ADMIN. EXTRAMURAL R&D	28,418	0	0	0	0	0	0	28,418
CAPITAL - R&D	103,959	0	0	0	0	0	0	103,959
SUB TOTAL R&D	771,228	337,332	312,642	11,824	45,896	46,983	7,959	1,533,864
DATA COLLECTION	225,182	13,047	2,065	673	5,256	50	3,129	249,402
INFORMATION SERVICES	80,125	2,487	268	1,308	534	1,301	930	87,033
TESTING & STANDARDIZATION	30,116	3,179	1,594	384	1	115	180	35,569
FEASIBILITY STUDIES	2,944	43,488	152	311	91	157	62	47,205
EDUCATION SUPPORT	424	640	20,945	0	0	2,375	958	25,342
MUSEUM SERVICES	12,858	337	337	506	2,528	0	337	16,903
ADMIN. EXTRAMURAL RSA	6,647	0	0	0	0	0	0	6,647
CAPITAL - RSA	23,336	0	0	0	0	0	0	23,336
SUB TOTAL RSA	381,632	63,178	25,361	3,262	8,410	3,998	5,596	491,437
TOTAL	1,152,860	400,510	338,003	15,086	54,306	50,981	13,555	2,025,301

FISCAL YEAR 1982-83

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	685,533	0	0	0	0	0	0	685,533
R&D CONTRACTS	168	167,636	24,891	7,081	1,333	4,174	5,833	211,116
SUPPORTING CONTRACTS	26,892	0	0	0	0	0	0	26,892
R&D GRANTS	0	217,777	314,366	8,284	54,368	41,390	2,752	638,849
RESEARCH FELLOWSHIPS	1,746	3,945	11,907	0	0	5,752	117	23,467
ADMIN. EXTRAMURAL R&D	36,647	0	0	0	0	0	0	36,647
CAPITAL - R&D	161,783	0	0	0	0	0	0	161,783
SUB TOTAL R&D	912,769	389,358	351,164	15,285	55,693	51,316	8,702	1,784,287
DATA COLLECTION	259,394	16,701	2,138	675	5,647	54	3,431	288,040
INFORMATION SERVICES	91,105	3,058	305	1,610	5,231	1,451	1,148	103,908
TESTING & STANDARDIZATION	33,414	3,620	1,816	375	1	0	270	39,496
FEASIBILITY STUDIES	3,247	50,104	194	338	143	196	74	54,288
EDUCATION SUPPORT	484	829	23,424	0	0	2,672	50	27,459
MUSEUM SERVICES	13,934	389	389	584	2,917	0	389	18,602
ADMIN. EXTRAMURAL RSA	8,097	0	0	0	0	0	0	8,097
CAPITAL - RSA	38,323	0	0	0	0	0	0	38,323
SUB TOTAL RSA	447,998	74,701	28,266	3,574	13,939	4,373	5,362	578,213
TOTAL	1,360,767	464,059	379,430	18,859	69,632	55,689	14,064	2,362,500

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	142,852	8,267	151,119	158,410	8,374	166,784	186,003	8,278	194,281
AGR-ADM	---	4,200	4,200	---	4,783	4,783	---	5,084	5,084
AGR-DEV	136,912	2,534	139,446	151,654	1,729	153,383	176,105	921	177,026
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	1,350	1,533	2,883	1,653	1,862	3,515	1,917	2,273	4,190
CDC	---	598	598	---	2,200	2,200	---	2,500	2,500
CLFB	---	---	---	---	---	---	---	---	---
COMMUNICATIONS									
COMM	60,501	70	60,571	76,069	70	76,139	61,330	100	61,430
COMM-COMM	60,501	70	60,571	76,069	70	76,139	61,330	100	61,430
COMM-AC	---	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---	---
CRTC	---	---	---	---	---	---	---	---	---
NFB	382	252	634	427	176	603	497	200	697
NLIB	---	---	---	---	---	---	---	---	---
NMUS	1,082	17,729	18,811	2,173	18,839	21,012	1,319	20,988	22,307
PA	---	---	---	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS									
CCA	---	14,545	14,545	---	14,972	14,972	---	17,731	17,731
CCA-ADM	---	---	---	---	---	---	---	---	---
CCA-CON	---	2,170	2,170	---	2,435	2,435	---	2,850	2,850
CCA-COR	---	12,375	12,375	---	12,537	12,537	---	14,881	14,881
CCA-CICP	---	---	---	---	---	---	---	---	---
ECONOMIC DEVELOPMENT									
ED	---	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION									
EI	---	---	---	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---	---	---	---
CEIC	---	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES									
EMR	128,407	42,230	170,637	172,372	46,870	219,242	211,661	57,174	268,835
EMR-ENER	45,851	577	46,428	65,751	2,241	67,992	75,159	3,743	78,902
EMR-MES	82,556	41,653	124,209	106,621	44,629	151,250	136,502	53,431	189,933
AECB	775	---	775	1,099	---	1,099	2,071	---	2,071
AECL	78,848	17,924	96,772	96,202	17,980	114,182	110,505	21,879	132,384
NEB	---	382	382	---	495	495	---	501	501
ENVIRONMENT									
ENV	87,336	144,315	231,651	100,489	161,529	262,018	119,585	195,099	314,684
ENV-ADM	399	1,180	1,579	432	1,189	1,621	475	1,207	1,682
ENV-ES	86,588	141,918	228,506	99,675	158,999	258,674	118,684	192,399	311,083
ENV-EPS	5,388	3,372	8,760	5,348	2,822	8,170	7,108	2,892	10,000
ENV-AES	18,860	96,973	115,833	22,627	111,480	134,107	26,807	137,943	164,750
ENV-ECS	16,810	36,823	53,633	18,250	39,854	58,104	20,950	46,021	66,971
ENV-FOR	45,530	4,750	50,280	53,450	4,843	58,293	63,819	5,543	69,362
ENV-PC	349	1,217	1,566	382	1,341	1,723	426	1,493	1,919
EXTERNAL AFFAIRS									
EA	---	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---	---
CIDA	8,595	23,639	32,234	9,709	26,030	35,739	11,062	28,632	39,694
IDRC	19,167	943	20,110	23,044	1,395	24,439	28,182	1,714	29,896
IJC	---	2,328	2,328	---	2,771	2,771	---	2,988	2,988
FINANCE									
FIN	---	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS									
F&O	56,684	56,219	112,903	63,157	63,384	126,541	63,967	78,034	142,001
F&O-FM	56,684	56,219	112,903	63,157	63,384	126,541	63,967	78,034	142,001
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	2,246	774	3,020	2,587	781	3,368	2,810	863	3,673
IAND-IIA	---	---	---	---	---	---	---	---	---
IAND-NA	2,246	774	3,020	2,587	781	3,368	2,810	863	3,673
INDUSTRY TRADE AND COMMERCE									
ITC	93,200	2,728	95,928	137,021	3,590	140,611	166,302	4,273	170,575
ITC-TI	91,972	2,728	94,700	135,883	3,590	139,473	165,242	4,273	169,515
ITC-TOUR	---	---	---	---	---	---	---	---	---
ITC-GO	1,228	---	1,228	1,138	---	1,138	1,060	---	1,060

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
JUSTICE									
JUST	---	---	---	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---	---
LRC	---	---	---	---	---	---	---	---	---
LABOUR									
LAB	---	---	---	---	---	---	---	---	---
NATIONAL DEFENCE									
NDEF	99,780	754	100,534	108,827	866	109,693	136,025	970	136,995
NDEF-SER	99,780	754	100,534	108,827	866	109,693	136,025	970	136,995
NATIONAL HEALTH AND WELFARE									
NHW	19,581	29,166	48,747	23,058	30,871	53,929	23,306	36,878	60,184
NHW-ADM	---	---	---	---	---	---	---	---	---
NHW-HSS	6,266	2,430	8,696	6,723	2,008	8,731	5,748	2,007	7,755
NHW-MS	2,086	---	2,086	3,918	---	3,918	2,167	---	2,167
NHW-HP	11,229	26,736	37,965	12,417	28,863	41,280	15,391	34,871	50,262
NHW-IS	---	---	---	---	---	---	---	---	---
MRC	79,461	2,570	82,031	96,849	3,318	100,167	109,146	3,738	112,884
NATIONAL REVENUE									
NREV	---	---	---	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---	---	---	---
PRIVY COUNCIL									
PC	---	---	---	---	---	---	---	---	---
COL	---	---	---	---	---	---	---	---	---
ECC	---	---	---	---	---	---	---	---	---
PUBLIC WORKS									
PW	4,260	4,050	8,310	1,408	6,249	7,657	2,380	5,758	8,138
PW-PTS	4,260	4,050	8,310	1,408	6,249	7,657	2,380	5,758	8,138
CMHC	1,815	1,311	3,126	2,747	2,037	4,784	3,040	2,175	5,215
NCC	---	160	160	---	250	250	---	425	425
REGIONAL ECONOMIC EXPANSION									
REE	---	771	771	---	957	957	---	5,588	5,588
SCIENCE AND TECHNOLOGY									
ST	1,358	---	1,358	1,553	---	1,553	1,895	---	1,895
NRC	189,977	36,125	226,102	254,997	42,377	297,374	312,448	48,244	360,692
NRC-SIR	189,977	21,467	211,444	254,997	23,787	278,784	312,448	26,579	339,027
NRC-STI	---	14,658	14,658	---	18,590	18,590	---	21,665	21,665
NSERC	146,238	16,633	162,871	180,023	21,780	201,803	202,484	24,597	227,081
SC	---	---	---	---	---	---	---	---	---
SECRETARY OF STATE									
SECS	---	---	---	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---	---	---	---
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	---	---	---	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---	---	---	---
RCMP	71	---	71	295	---	295	300	---	300
SUPPLY AND SERVICES									
SS	12,172	2,219	14,391	12,376	2,185	14,561	12,387	2,187	14,574
SS-SUPP	12,172	2,219	14,391	12,376	2,185	14,561	12,387	2,187	14,574
STCAN	---	---	---	---	---	---	---	---	---
TRANSPORT									
TPT	5,232	10,885	16,117	8,972	11,091	20,063	15,582	6,699	22,281
TPT-ADM	3,583	1,570	5,153	5,556	2,677	8,233	6,039	3,081	9,120
TPT-MAR	1,321	7,192	8,513	2,809	6,118	8,927	8,445	1,466	9,911
TPT-AIR	303	2,104	2,407	583	2,260	2,843	1,048	2,116	3,164
TPT-SUR	25	19	44	24	36	60	50	36	86
CTC	---	---	---	---	---	---	---	---	---
TREASURY BOARD									
TB	---	---	---	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---	---	---	---
TOTAL	1,240,020	437,587	1,677,607	1,533,864	491,437	2,025,301	1,784,287	578,213	2,362,500

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	140,444	10,675	151,119	156,245	10,539	166,784	182,351	11,930	194,281
AGR-ADM	4,200	---	4,200	4,783	---	4,783	5,084	---	5,084
AGR-DEV	128,775	10,671	139,446	142,848	10,535	153,383	165,100	11,926	177,026
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	2,879	4	2,883	3,511	4	3,515	4,186	4	4,190
CDC	---	598	598	---	2,200	2,200	---	2,500	2,500
CLFB	---	---	---	---	---	---	---	---	---
COMMUNICATIONS									
COMM	41,810	18,761	60,571	49,739	26,400	76,139	52,005	9,425	61,430
COMM-COMM	41,810	18,761	60,571	49,739	26,400	76,139	52,005	9,425	61,430
COMM-AC	---	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---	---
CRTC	---	---	---	---	---	---	---	---	---
NFB	634	---	634	603	---	603	697	---	697
NLIB	---	---	---	---	---	---	---	---	---
NMUS	14,882	3,929	18,811	16,842	4,170	21,012	17,625	4,682	22,307
PA	---	---	---	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS									
CCA	14,545	---	14,545	14,972	---	14,972	17,731	---	17,731
CCA-ADM	---	---	---	---	---	---	---	---	---
CCA-CON	2,170	---	2,170	2,435	---	2,435	2,850	---	2,850
CCA-COR	12,375	---	12,375	12,537	---	12,537	14,881	---	14,881
CCA-CICP	---	---	---	---	---	---	---	---	---
ECONOMIC DEVELOPMENT									
ED	---	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION									
EI	---	---	---	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---	---	---	---
CEIC	---	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES									
EMR	109,203	61,434	170,637	131,569	87,673	219,242	166,148	102,687	268,835
EMR-ENER	749	45,679	46,428	1,284	66,708	67,992	3,866	75,036	78,902
EMR-MES	108,454	15,755	124,209	130,285	20,965	151,250	162,282	27,651	189,933
AECB	240	535	775	270	829	1,099	311	1,760	2,071
AECL	74,129	22,643	96,772	87,959	26,223	114,182	102,582	29,802	132,384
NEB	382	---	382	495	---	495	501	---	501
ENVIRONMENT									
ENV	202,639	29,012	231,651	229,714	32,304	262,018	281,669	33,015	314,684
ENV-ADM	1,579	---	1,579	1,621	---	1,621	1,682	---	1,682
ENV-ES	199,969	28,537	228,506	226,893	31,781	258,674	278,652	32,431	311,083
ENV-EPS	5,353	3,407	8,760	4,933	3,237	8,170	5,528	4,472	10,000
ENV-AES	111,831	4,002	115,833	129,540	4,567	134,107	160,303	4,447	164,750
ENV-ECS	47,242	6,391	53,633	50,993	7,111	58,104	59,242	7,729	66,971
ENV-FOR	35,543	14,737	50,280	41,427	16,866	58,293	53,579	15,783	69,362
ENV-PC	1,091	475	1,566	1,200	523	1,723	1,335	584	1,919
EXTERNAL AFFAIRS									
EA	---	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---	---
CIDA	560	31,674	32,234	654	35,085	35,739	717	38,977	39,694
IDRC	3,291	16,819	20,110	3,959	20,480	24,439	4,884	25,012	29,896
IJC	2,249	79	2,328	2,657	114	2,771	2,786	202	2,988
FINANCE									
FIN	---	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS									
F&O	103,887	9,016	112,903	114,095	12,446	126,541	124,001	18,000	142,001
F&O-FM	103,887	9,016	112,903	114,095	12,446	126,541	124,001	18,000	142,001
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	2,136	884	3,020	2,354	1,014	3,368	2,599	1,074	3,673
IAND-IIA	---	---	---	---	---	---	---	---	---
IAND-NA	2,136	884	3,020	2,354	1,014	3,368	2,599	1,074	3,673
INDUSTRY TRADE AND COMMERCE									
ITC	6,200	89,728	95,928	7,032	133,579	140,611	8,526	162,049	170,575
ITC-TI	6,150	88,550	94,700	6,977	132,496	139,473	8,466	161,049	169,515
ITC-TOUR	---	---	---	---	---	---	---	---	---
ITC-GO	50	1,178	1,228	55	1,083	1,138	60	1,000	1,060

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	---	---	---	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---	---
LRC	---	---	---	---	---	---	---	---	---
LABOUR									
LAB	---	---	---	---	---	---	---	---	---
NATIONAL DEFENCE									
NDEF	71,793	28,741	100,534	73,584	36,109	109,693	82,010	54,985	136,995
NDEF-SER	71,793	28,741	100,534	73,584	36,109	109,693	82,010	54,985	136,995
NATIONAL HEALTH AND WELFARE									
NHW	38,947	9,800	48,747	42,694	11,235	53,929	50,007	10,177	60,184
NHW-ADM	---	---	---	---	---	---	---	---	---
NHW-HSS	545	8,151	8,696	644	8,087	8,731	675	7,080	7,755
NHW-MS	1,745	341	2,086	2,918	1,000	3,918	2,167	---	2,167
NHW-HP	36,657	1,308	37,965	39,132	2,148	41,280	47,165	3,097	50,262
NHW-IS	---	---	---	---	---	---	---	---	---
MRC	1,356	80,475	82,031	1,757	98,410	100,167	1,976	110,908	112,884
NATIONAL REVENUE									
NREV	---	---	---	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---	---	---	---
PRIVY COUNCIL									
PC	---	---	---	---	---	---	---	---	---
COL	---	---	---	---	---	---	---	---	---
ECC	---	---	---	---	---	---	---	---	---
PUBLIC WORKS									
PW	3,944	4,366	8,310	5,511	2,146	7,657	5,508	2,630	8,138
PW-PTS	3,944	4,366	8,310	5,511	2,146	7,657	5,508	2,630	8,138
CMHC	2,077	1,049	3,126	2,730	2,054	4,784	3,054	2,161	5,215
NCC	160	---	160	250	---	250	425	---	425
REGIONAL ECONOMIC EXPANSION									
REE	---	771	771	---	957	957	---	5,588	5,588
SCIENCE AND TECHNOLOGY									
ST	---	1,358	1,358	---	1,553	1,553	---	1,895	1,895
NRC	159,801	66,301	226,102	193,362	104,012	297,374	240,469	120,223	360,692
NRC-SIR	145,143	66,301	211,444	174,838	103,946	278,784	218,878	120,149	339,027
NRC-STI	14,658	---	14,658	18,524	66	18,590	21,591	74	21,665
NSERC	3,346	159,525	162,871	4,312	197,491	201,803	5,686	221,395	227,081
SC	---	---	---	---	---	---	---	---	---
SECRETARY OF STATE									
SECS	---	---	---	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---	---	---	---
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	---	---	---	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---	---	---	---
RCMP	---	71	71	150	145	295	150	150	300
SUPPLY AND SERVICES									
SS	103	14,288	14,391	113	14,448	14,561	124	14,450	14,574
SS-SUPP	103	14,288	14,391	113	14,448	14,561	124	14,450	14,574
STCAN	---	---	---	---	---	---	---	---	---
TRANSPORT									
TPT	8,519	7,598	16,117	9,238	10,825	20,063	6,225	16,056	22,281
TPT-ADM	1,136	4,017	5,153	2,009	6,224	8,233	2,142	6,978	9,120
TPT-MAR	7,066	1,447	8,513	6,463	2,464	8,927	2,890	7,021	9,911
TPT-AIR	308	2,099	2,407	740	2,103	2,843	1,167	1,997	3,164
TPT-SUR	9	35	44	26	34	60	26	60	86
CTC	---	---	---	---	---	---	---	---	---
TREASURY BOARD									
TB	---	---	---	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---	---	---	---
TOTAL	1,007,477	670,130	1,677,607	1,152,860	872,441	2,025,301	1,360,767	1,001,733	2,362,500

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INTRAMURAL, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	133,922	6,522	140,444	148,792	7,453	156,245	174,077	8,274	182,351
AGR-ADM	---	4,200	4,200	---	4,783	4,783	---	5,084	5,084
AGR-DEV	127,982	793	128,775	142,036	812	142,848	164,179	921	165,100
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	1,350	1,529	2,879	1,653	1,858	3,511	1,917	2,269	4,186
COMMUNICATIONS									
COMM	41,740	70	41,810	49,669	70	49,739	51,905	100	52,005
COMM-COMM	41,740	70	41,810	49,669	70	49,739	51,905	100	52,005
NFB	382	252	634	427	176	603	497	200	697
NMUS	973	13,909	14,882	2,048	14,794	16,842	1,305	16,320	17,625
CONSUMER AND CORPORATE AFFAIRS									
CCA	---	14,545	14,545	---	14,972	14,972	---	17,731	17,731
CCA-CON	---	2,170	2,170	---	2,435	2,435	---	2,850	2,850
CCA-COR	---	12,375	12,375	---	12,537	12,537	---	14,881	14,881
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
ENERGY MINES & RESOURCES									
EMR	72,857	36,346	109,203	91,637	39,932	131,569	119,100	47,048	166,148
EMR-ENER	420	329	749	1,045	239	1,284	3,184	682	3,866
EMR-MES	72,437	36,017	108,454	90,592	39,693	130,285	115,916	46,366	162,282
AECB	240	---	240	270	---	270	311	---	311
AECL	68,819	5,310	74,129	82,431	5,528	87,959	95,428	7,154	102,582
NEB	---	382	382	---	495	495	---	501	501
ENVIRONMENT									
ENV	67,287	135,352	202,639	78,222	151,492	229,714	96,942	184,727	281,669
ENV-ADM	399	1,180	1,579	432	1,189	1,621	475	1,207	1,682
ENV-ES	66,779	133,190	199,969	77,671	149,222	226,893	96,335	182,317	278,652
ENV-EPS	2,306	3,047	5,353	2,398	2,535	4,933	2,923	2,605	5,528
ENV-AES	18,091	93,740	111,831	21,796	107,744	129,540	25,923	134,389	160,303
ENV-ECS	15,589	31,653	47,242	16,893	34,100	50,993	19,453	39,789	59,242
ENV-FOR	30,793	4,750	35,543	36,584	4,843	41,427	48,036	5,543	53,579
ENV-PC	109	982	1,091	119	1,081	1,200	132	1,203	1,335
EXTERNAL AFFAIRS									
CIDA	146	414	560	170	484	654	187	530	717
IDRC	3,051	240	3,291	3,690	269	3,959	4,576	308	4,884
IJC	---	2,249	2,249	---	2,657	2,657	---	2,786	2,786
FINANCE									
FISHERIES AND OCEANS									
F&O	50,209	53,678	103,887	54,871	59,224	114,095	53,108	70,893	124,001
F&O-FM	50,209	53,678	103,887	54,871	59,224	114,095	53,108	70,893	124,001
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	1,383	753	2,136	1,596	758	2,354	1,761	838	2,599
IAND-NA	1,383	753	2,136	1,596	758	2,354	1,761	838	2,599
INDUSTRY TRADE AND COMMERCE									
ITC	6,200	---	6,200	7,032	---	7,032	8,526	---	8,526
ITC-TI	6,150	---	6,150	6,977	---	6,977	8,466	---	8,466
ITC-GO	50	---	50	55	---	55	60	---	60

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INTRAMURAL, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NDEF	71,039	754	71,793	72,718	866	73,584	81,040	970	82,010
NDEF-SER	71,039	754	71,793	72,718	866	73,584	81,040	970	82,010
NATIONAL HEALTH AND WELFARE									
NHW	12,489	26,538	38,947	14,002	28,692	42,694	15,348	34,659	50,007
NHW-HSS	318	227	545	434	210	644	448	227	675
NHW-MS	1,745	---	1,745	2,918	---	2,918	2,167	---	2,167
NHW-HP	10,346	26,311	36,657	10,650	28,482	39,132	12,733	34,432	47,165
MRC	1,435	121	1,556	1,618	139	1,757	1,821	155	1,976
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	1,318	2,626	3,944	353	5,158	5,511	777	4,731	5,508
PW-PTS	1,318	2,626	3,944	353	5,158	5,511	777	4,731	5,508
CMHC	1,380	697	2,077	1,900	830	2,730	2,110	944	3,054
NCC	---	160	160	---	250	250	---	425	425
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
NRC	126,182	33,619	159,801	153,342	40,020	193,362	194,891	45,578	240,469
NRC-SIR	126,182	18,961	145,143	153,342	21,496	174,838	194,891	23,987	218,878
NRC-STI	---	14,658	14,658	---	18,524	18,524	---	21,591	21,591
NSERC	2,677	669	3,346	3,450	862	4,312	4,548	1,138	5,686
SECRETARY OF STATE									
SOLICITOR GENERAL									
RCMP	---	---	0	150	---	150	150	---	150
SUPPLY AND SERVICES									
SS	87	16	103	96	17	113	105	19	124
SS-SUPP	87	16	103	96	17	113	105	19	124
TRANSPORT									
TPT	1,598	6,921	8,519	2,744	6,494	9,238	4,256	1,969	6,225
TPT-ADM	693	443	1,136	1,216	793	2,009	1,184	958	2,142
TPT-MAR	602	6,464	7,066	945	5,518	6,463	2,024	866	2,890
TPT-AIR	303	5	308	583	157	740	1,048	119	1,167
TPT-SUR	---	9	9	---	26	26	---	26	26
TREASURY BOARD									
TOTAL	665,334	342,143	1,007,477	771,228	381,632	1,152,860	912,769	447,998	1,360,767

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INDUSTRY, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	3,060	---	3,060	3,764	---	3,764	5,082	---	5,082
AGR-DEV	3,060	---	3,060	3,764	---	3,764	5,082	---	5,082
CDC	---	196	196	---	1,100	1,100	---	1,300	1,300
COMMUNICATIONS									
COMM	16,197	---	16,197	22,108	---	22,108	8,465	---	8,465
COMM-COMM	16,197	---	16,197	22,108	---	22,108	8,465	---	8,465
NMUS	---	318	318	---	337	337	---	389	389
CONSUMER AND CORPORATE AFFAIRS									
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
ENERGY MINES & RESOURCES									
EMR	21,203	5,610	26,813	27,129	6,676	33,805	26,054	9,855	35,909
EMR-ENER	16,605	209	16,814	18,583	2,002	20,585	15,485	3,061	18,546
EMR-MES	4,598	5,401	9,999	8,546	4,674	13,220	10,569	6,794	17,363
AECB	270	---	270	411	---	411	1,100	---	1,100
AECL	7,655	12,590	20,245	11,155	12,413	23,568	12,248	14,695	26,943
ENVIRONMENT									
ENV	13,217	1,419	14,636	14,077	1,617	15,694	12,224	1,477	13,701
ENV-ES	13,089	1,355	14,444	13,936	1,547	15,483	12,066	1,399	13,465
ENV-EPS	2,102	285	2,387	2,200	240	2,440	3,435	240	3,675
ENV-AES	---	473	473	---	634	634	---	418	418
ENV-ECS	187	597	784	185	673	858	231	741	972
ENV-FOR	10,800	---	10,800	11,551	---	11,551	8,400	---	8,400
ENV-PC	128	64	192	141	70	211	158	78	236
EXTERNAL AFFAIRS									
CIDA	---	22,400	22,400	---	24,640	24,640	---	27,104	27,104
FINANCE									
FISHERIES AND OCEANS									
F&O	3,350	1,965	5,315	5,238	3,423	8,661	7,092	6,164	13,256
F&O-FM	3,350	1,965	5,315	5,238	3,423	8,661	7,092	6,164	13,256
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	228	21	249	209	23	232	170	25	195
IAND-NA	228	21	249	209	23	232	170	25	195
INDUSTRY TRADE AND COMMERCE									
ITC	84,184	2,728	86,912	128,095	3,590	131,685	155,883	4,273	160,156
ITC-TI	83,416	2,728	86,144	127,413	3,590	131,003	155,283	4,273	159,556
ITC-GO	768	---	768	682	---	682	600	---	600
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NDEF	22,972	---	22,972	29,708	---	29,708	47,093	---	47,093
NDEF-SER	22,972	---	22,972	29,708	---	29,708	47,093	---	47,093
NATIONAL HEALTH AND WELFARE									
NHW	122	360	482	245	293	538	325	310	635
NHW-HSS	107	63	170	142	29	171	180	10	190
NHW-HP	15	297	312	103	264	367	145	300	445
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	2,937	1,125	4,062	1,045	908	1,953	1,553	990	2,543
PW-PTS	2,937	1,125	4,062	1,045	908	1,953	1,553	990	2,543
CMHC	330	550	880	660	1,000	1,660	725	1,005	1,730
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
NRC	46,020	666	46,686	74,090	963	75,053	85,775	812	86,587
NRC-SIR	46,020	666	46,686	74,090	963	75,053	85,775	812	86,587
NSERC	1,639	---	1,639	2,839	400	3,239	3,945	447	4,392
SECRETARY OF STATE									
SOLICITOR GENERAL									
RCMP	42	---	42	60	---	60	90	---	90
SUPPLY AND SERVICES									
SS	10,552	1,780	12,332	10,683	1,742	12,425	10,685	1,742	12,427
SS-SUPP	10,552	1,780	12,332	10,683	1,742	12,425	10,685	1,742	12,427
TRANSPORT									
TPT	3,240	3,688	6,928	5,816	4,053	9,869	10,849	4,113	14,962
TPT-ADM	2,595	881	3,476	3,952	1,370	5,322	4,428	1,536	5,964
TPT-MAR	645	708	1,353	1,864	580	2,444	6,421	580	7,001
TPT-AIR	---	2,099	2,099	---	2,103	2,103	---	1,997	1,997
TREASURY BOARD									
TOTAL	237,218	55,416	292,634	337,332	63,178	400,510	389,358	74,701	464,059

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

UNIVERSITY, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	3,752	---	3,752	4,369	---	4,369	5,554	---	5,554
AGR-DEV	3,752	---	3,752	4,369	---	4,369	5,554	---	5,554
CDC	---	102	102	---	700	700	---	800	800
COMMUNICATIONS									
COMM	975	---	975	1,025	---	1,025	960	---	960
COMM-COMM	975	---	975	1,025	---	1,025	960	---	960
NMUS	---	318	318	---	337	337	---	389	389
CONSUMER AND CORPORATE AFFAIRS									
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
ENERGY MINES & RESOURCES									
EMR	2,862	141	3,003	4,193	171	4,364	4,567	102	4,749
EMR-ENER	215	16	231	130	---	130	130	---	130
EMR-MES	2,647	125	2,772	4,063	171	4,234	4,437	182	4,619
AECB	219	---	219	364	---	364	550	---	550
AECL	1,781	24	1,805	1,900	39	1,939	2,136	30	2,166
ENVIRONMENT									
ENV	3,200	332	3,532	3,385	496	3,881	3,560	558	4,118
ENV-ES	3,123	324	3,447	3,301	486	3,787	3,466	548	4,014
ENV-EPS	515	---	515	315	---	315	315	---	315
ENV-AES	614	211	825	732	358	1,090	775	408	1,183
ENV-ECS	764	113	877	836	128	964	897	140	1,037
ENV-FOR	1,230	---	1,230	1,418	---	1,418	1,479	---	1,479
ENV-PC	77	8	85	84	10	94	94	10	104
EXTERNAL AFFAIRS									
CIDA	---	729	729	---	801	801	---	882	882
IDRC	188	---	188	422	80	502	851	123	974
FINANCE									
FISHERIES AND OCEANS									
F&O	1,220	8	1,228	1,197	9	1,206	1,558	---	1,558
F&O-FM	1,220	8	1,228	1,197	9	1,206	1,558	---	1,558
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	577	---	577	722	---	722	815	---	815
IAND-NA	577	---	577	722	---	722	815	---	815
INDUSTRY TRADE AND COMMERCE									
ITC	971	---	971	1,376	---	1,376	1,350	---	1,350
ITC-TI	936	---	936	1,350	---	1,350	1,350	---	1,350
ITC-GO	35	---	35	26	---	26	---	---	0
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NDEF	2,805	---	2,805	4,210	---	4,210	5,026	---	5,026
NDEF-SER	2,805	---	2,805	4,210	---	4,210	5,026	---	5,026
NATIONAL HEALTH AND WELFARE									
NHW	5,275	1,424	6,699	5,585	1,093	6,678	5,254	1,122	6,376
NHW-HSS	4,835	1,321	6,156	5,344	991	6,335	4,324	1,000	5,324
NHW-HP	440	103	543	241	102	343	930	122	1,052
MRC	75,214	2,283	77,497	92,054	2,983	95,037	103,745	3,362	107,107
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	---	43	43	10	5	15	10	---	10
PW-PTS	---	43	43	10	5	15	10	---	10
CMHC	23	3	26	57	2	59	70	5	75
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
NRC	14,963	701	15,664	20,194	797	20,991	23,824	895	24,719
NRC-SIR	14,963	701	15,664	20,194	797	20,991	23,824	895	24,719
NSERC	138,848	13,419	152,267	170,192	17,467	187,659	189,939	19,531	209,470
SECRETARY OF STATE									
SOLICITOR GENERAL									
RCMP	29	---	29	85	---	85	60	---	60
SUPPLY AND SERVICES									
SS	1,017	281	1,298	982	318	1,300	982	318	1,300
SS-SUPP	1,017	281	1,298	982	318	1,300	982	318	1,300
TRANSPORT									
TPT	161	85	246	320	63	383	353	69	422
TPT-ADM	161	85	246	320	63	383	353	69	422
TREASURY BOARD									
TOTAL	254,080	19,893	273,973	312,642	25,361	338,003	351,164	28,266	379,430

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

NON-PROFIT INSTITUTIONS, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	397	---	397	502	---	502	681	---	681
AGR-DEV	397	---	397	502	---	502	681	---	681
CDC	---	300	300	---	400	400	---	400	400
COMMUNICATIONS									
NMUS	---	478	478	---	506	506	---	584	584
CONSUMER AND CORPORATE AFFAIRS									
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
ENERGY MINES & RESOURCES									
EMR	767	38	805	1,926	32	1,958	2,426	30	2,456
EMR-ENER	17	8	25	1,710	---	1,710	2,110	---	2,110
EMR-MES	750	30	780	216	32	248	316	30	346
AECB	3	---	3	5	---	5	10	---	10
ENVIRONMENT									
ENV	2,724	190	2,914	3,660	224	3,884	5,630	251	5,881
ENV-ES	2,724	32	2,756	3,660	50	3,710	5,630	56	5,686
ENV-EPS	236	---	236	75	---	75	75	---	75
ENV-AES	13	16	29	---	32	32	---	36	36
ENV-ECS	---	16	16	---	18	18	---	20	20
ENV-FOR	2,475	---	2,475	3,585	---	3,585	5,555	---	5,555
ENV-PC	---	158	158	---	174	174	---	195	195
EXTERNAL AFFAIRS									
IDRC	19	---	19	73	---	73	162	---	162
FINANCE									
FISHERIES AND OCEANS									
F&O	1,485	325	1,810	1,479	---	1,479	1,721	---	1,721
F&O-FM	1,485	325	1,810	1,479	---	1,479	1,721	---	1,721
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	56	---	56	58	---	58	62	---	62
IAND-NA	56	---	56	58	---	58	62	---	62
INDUSTRY TRADE AND COMMERCE									
ITC	375	---	375	375	---	375	400	---	400
ITC-GO	375	---	375	375	---	375	400	---	400
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NATIONAL HEALTH AND WELFARE									
NHW	911	772	1,683	771	740	1,511	891	735	1,626
NHW-HSS	860	772	1,632	685	740	1,425	706	735	1,441
NHW-HP	51	---	51	86	---	86	185	---	185
MRC	---	135	135	---	157	157	---	177	177
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	---	49	49	---	34	34	---	35	35
PW-PTS	---	49	49	---	34	34	---	35	35
CMHC	49	20	69	65	80	145	70	80	150
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
NRC	140	---	140	1,064	66	1,130	1,017	74	1,091
NRC-SIR	140	---	140	1,064	---	1,064	1,017	---	1,017
NRC-STI	---	---	0	---	66	66	---	74	74
NSERC	1,558	834	2,392	1,722	975	2,697	2,065	1,160	3,225
SECRETARY OF STATE									
SOLICITOR GENERAL									
SUPPLY AND SERVICES									
SS	75	31	106	100	48	148	100	48	148
SS-SUPP	75	31	106	100	48	148	100	48	148
TRANSPORT									
TPT	25	---	25	24	---	24	50	---	50
TPT-SUR	25	---	25	24	---	24	50	---	50
TREASURY BOARD									
TOTAL	8,584	3,172	11,756	11,824	3,262	15,086	15,285	3,574	18,859

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

PROVINCIAL & MUNICIPAL GOVERNMENTS, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	1,692	---	1,692	295	---	295	---	---	0
AGR-DEV	1,692	---	1,692	295	---	295	---	---	0
COMMUNICATIONS									
NMUS	---	2,388	2,388	---	2,528	2,528	---	2,917	2,917
CONSUMER AND CORPORATE AFFAIRS									
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
ENERGY MINES & RESOURCES									
EMR	28,305	---	28,305	44,330	---	44,330	54,250	---	54,250
EMR-ENER	28,305	---	28,305	44,283	---	44,283	54,250	---	54,250
EMR-MES	---	---	0	47	---	47	---	---	0
AECB	23	---	23	---	---	0	20	---	20
ENVIRONMENT									
ENV	229	4,093	4,322	300	4,525	4,825	272	4,873	5,145
ENV-ES	228	4,093	4,321	299	4,525	4,824	271	4,873	5,144
ENV-EPS	50	---	50	60	---	60	60	---	60
ENV-AES	---	117	117	---	120	120	---	123	123
ENV-ECS	58	3,976	4,034	99	4,405	4,504	108	4,750	4,858
ENV-FOR	120	---	120	140	---	140	103	---	103
ENV-PC	1	---	1	1	---	1	1	---	1
EXTERNAL AFFAIRS									
FINANCE									
FISHERIES AND OCEANS									
F&O	---	20	20	---	74	74	---	190	190
F&O-FM	---	20	20	---	74	74	---	190	190
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
INDUSTRY TRADE AND COMMERCE									
ITC	1,158	---	1,158	---	---	0	---	---	0
ITC-TI	1,158	---	1,158	---	---	0	---	---	0
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NDEF	120	---	120	150	---	150	207	---	207
NDEF-SER	120	---	120	150	---	150	207	---	207
NATIONAL HEALTH AND WELFARE									
NHW	93	49	142	89	39	128	90	36	126
NHW-HSS	93	47	140	89	38	127	90	35	125
NHW-HP	---	2	2	---	1	1	---	1	1
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	---	---	0	---	---	0	40	---	40
PW-PTS	---	---	0	---	---	0	40	---	40
CMHC	28	5	33	55	50	105	55	55	110
REGIONAL ECONOMIC EXPANSION									
REE	---	771	771	---	957	957	---	5,588	5,588
SCIENCE AND TECHNOLOGY									
NRC	68	---	68	677	---	677	759	---	759
NRC-SIR	68	---	68	677	---	677	759	---	759
SECRETARY OF STATE									
SOLICITOR GENERAL									
SUPPLY AND SERVICES									
TRANSPORT									
TPT	3	92	95	---	237	237	---	280	280
TPT-ADM	3	92	95	---	237	237	---	280	280
TREASURY BOARD									
TOTAL	31,719	7,418	39,137	45,896	8,410	54,306	55,693	13,939	69,632

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

FOREIGN, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	29	4	33	688	4	692	609	4	613
AGR-DEV	29	---	29	688	---	688	609	---	609
AGR-CGC	---	4	4	---	4	4	---	4	4
COMMUNICATIONS									
COMM	1,589	---	1,589	3,267	---	3,267	---	---	0
COMM-COMM	1,589	---	1,589	3,267	---	3,267	---	---	0
CONSUMER AND CORPORATE AFFAIRS									
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
ENERGY MINES & RESOURCES									
EMR	1,353	32	1,385	1,229	22	1,251	2,930	22	2,952
EMR-ENER	289	15	304	---	---	0	---	---	0
EMR-MES	1,064	17	1,081	1,229	22	1,251	2,930	22	2,952
AECL	259	---	259	586	---	586	554	---	554
ENVIRONMENT									
ENV	265	592	857	188	618	806	213	620	833
ENV-ES	265	592	857	188	618	806	213	620	833
ENV-EPS	122	---	122	15	---	15	15	---	15
ENV-AES	21	567	588	---	590	590	---	590	590
ENV-ECS	14	25	39	15	28	43	18	30	48
ENV-FOR	108	---	108	158	---	158	180	---	180
EXTERNAL AFFAIRS									
CIDA	8,449	96	8,545	9,539	105	9,644	10,875	116	10,991
IDRC	15,793	656	16,449	18,763	1,006	19,769	22,476	1,234	23,710
FINANCE									
FISHERIES AND OCEANS									
F&O	90	---	90	29	---	29	64	---	64
F&O-FM	90	---	90	29	---	29	64	---	64
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
INDUSTRY TRADE AND COMMERCE									
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NDEF	2,770	---	2,770	1,972	---	1,972	2,573	---	2,573
NDEF-SER	2,770	---	2,770	1,972	---	1,972	2,573	---	2,573
NATIONAL HEALTH AND WELFARE									
NHW	504	---	504	1,923	---	1,923	838	---	838
NHW-HSS	48	---	48	29	---	29	---	---	0
NHW-MS	341	---	341	1,000	---	1,000	---	---	0
NHW-HP	115	---	115	894	---	894	838	---	838
MRC	2,812	31	2,843	3,177	39	3,216	3,580	44	3,624
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	5	110	115	---	115	115	---	2	2
PW-PTS	5	110	115	---	115	115	---	2	2
CMHC	---	3	3	---	10	10	---	10	10
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
ST	1,358	---	1,358	1,553	---	1,553	1,895	---	1,895
NRC	1,965	---	1,965	2,249	---	2,249	2,722	---	2,722
NRC-SIR	1,965	---	1,965	2,249	---	2,249	2,722	---	2,722
NSERC	1,516	1,711	3,227	1,820	2,076	3,896	1,987	2,321	4,308
SECRETARY OF STATE									
SOLICITOR GENERAL									
SUPPLY AND SERVICES									
TRANSPORT									
TPT	74	3	77	---	3	3	---	---	0
TPT-ADM	---	3	3	---	3	3	---	---	0
TPT-MAR	74	---	74	---	---	0	---	---	0
TREASURY BOARD									
TOTAL	38,831	3,238	42,069	46,983	3,998	50,981	51,316	4,373	55,689

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

OTHER, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	---	1,741	1,741	---	917	917	---	---	0
AGR-DEV	---	1,741	1,741	---	917	917	---	---	0
COMMUNICATIONS									
NRUS	109	318	427	125	337	462	14	389	403
CONSUMER AND CORPORATE AFFAIRS									
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
ENERGY MINES & RESOURCES									
EMR	1,060	63	1,123	1,928	37	1,965	2,334	37	2,371
EMR-MES	1,060	63	1,123	1,928	37	1,965	2,334	37	2,371
AECB	20	---	20	49	---	49	80	---	80
AECL	334	---	334	130	---	130	139	---	139
ENVIRONMENT									
ENV	414	2,337	2,751	657	2,557	3,214	744	2,593	3,337
ENV-ES	380	2,332	2,712	620	2,551	3,171	703	2,586	3,289
ENV-EPS	57	40	97	285	47	332	285	47	332
ENV-AES	121	1,849	1,970	99	2,002	2,101	109	1,988	2,097
ENV-ECS	198	443	641	222	502	724	243	551	794
ENV-FOR	4	---	4	14	---	14	66	---	66
ENV-PC	34	5	39	37	6	43	41	7	48
EXTERNAL AFFAIRS									
IDRC	116	47	163	96	40	136	117	49	166
IJC	---	79	79	---	114	114	---	202	202
FINANCE									
FISHERIES AND OCEANS									
F&O	330	223	553	343	654	997	424	787	1,211
F&O-FM	330	223	553	343	654	997	424	787	1,211
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	2	---	2	2	---	2	2	---	2
IAND-NA	2	---	2	2	---	2	2	---	2
INDUSTRY TRADE AND COMMERCE									
ITC	312	---	312	143	---	143	143	---	143
ITC-TI	312	---	312	143	---	143	143	---	143
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NDEF	74	---	74	69	---	69	86	---	86
NDEF-SER	74	---	74	69	---	69	86	---	86
NATIONAL HEALTH AND WELFARE									
NHW	267	23	290	443	14	457	560	16	576
NHW-HSS	5	---	5	---	---	0	---	---	0
NHW-HP	262	23	285	443	14	457	560	16	576
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
PW	---	97	97	---	29	29	---	---	0
PW-PTS	---	97	97	---	29	29	---	---	0
CMHC	5	33	38	10	65	75	10	76	86
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
NRC	639	1,139	1,778	3,381	531	3,912	3,460	885	4,345
NRC-SIR	639	1,139	1,778	3,381	531	3,912	3,460	885	4,345
SECRETARY OF STATE									
SOLICITOR GENERAL									
SUPPLY AND SERVICES									
SS	441	111	552	515	60	575	515	60	575
SS-SUPP	441	111	552	515	60	575	515	60	575
TRANSPORT									
TPT	131	96	227	68	241	309	74	268	342
TPT-ADM	131	66	197	68	211	279	74	238	312
TPT-MAR	---	20	20	---	20	20	---	20	20
TPT-SUR	---	10	10	---	10	10	---	10	10
TREASURY BOARD									
TOTAL	4,254	6,307	10,561	7,959	5,596	13,555	8,702	5,362	14,064

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON RESEARCH AND DEVELOPMENT
BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	665,334	(53.7)	771,228	(50.3)	912,769	(51.2)
INDUSTRY	237,218	(19.1)	337,332	(22.0)	389,358	(21.8)
UNIVERSITIES	254,080	(20.5)	312,642	(20.4)	351,164	(19.7)
NON-PROFIT INSTITUTIONS	8,584	(0.7)	11,824	(0.8)	15,285	(0.9)
PROVINCIAL & MUNICIPAL	31,719	(2.6)	45,896	(3.0)	55,693	(3.1)
FOREIGN	38,831	(3.1)	46,983	(3.1)	51,316	(2.9)
OTHER CANADIAN	4,254	(0.3)	7,959	(0.5)	8,702	(0.5)
TOTAL	1,240,020	(100.0)	1,533,864	(100.0)	1,784,287	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES

BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	342,143	(78.2)	381,632	(77.7)	447,998	(77.5)
INDUSTRY	55,416	(12.7)	63,178	(12.9)	74,701	(12.9)
UNIVERSITIES	19,893	(4.5)	25,361	(5.2)	28,266	(4.9)
NON-PROFIT INSTITUTIONS	3,172	(0.7)	3,262	(0.7)	3,574	(0.6)
PROVINCIAL & MUNICIPAL	7,418	(1.7)	8,410	(1.7)	13,939	(2.4)
FOREIGN	3,238	(0.7)	3,998	(0.8)	4,373	(0.8)
OTHER CANADIAN	6,307	(1.4)	5,596	(1.1)	5,362	(0.9)
TOTAL	437,587	(100.0)	491,437	(100.0)	578,213	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RESEARCH AND DEVELOPMENT

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	133,922	8,930	142,852	148,792	9,618	158,410	174,077	11,926	186,003
AGR-ADM	---	---	---	---	---	---	---	---	---
AGR-DEV	127,982	8,930	136,912	142,036	9,618	151,654	164,179	11,926	176,105
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	1,350	---	1,350	1,653	---	1,653	1,917	---	1,917
CDC	---	---	---	---	---	---	---	---	---
CLFB	---	---	---	---	---	---	---	---	---
COMMUNICATIONS									
COMM	41,740	18,761	60,501	49,669	26,400	76,069	51,905	9,425	61,330
COMM-COMM	41,740	18,761	60,501	49,669	26,400	76,069	51,905	9,425	61,330
COMM-AC	---	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---	---
CRTC	---	---	---	---	---	---	---	---	---
NFB	382	---	382	427	---	427	497	---	497
NLIB	---	---	---	---	---	---	---	---	---
NMUS	973	109	1,082	2,048	125	2,173	1,305	14	1,319
PA	---	---	---	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS									
CCA	---	---	---	---	---	---	---	---	---
CCA-ADM	---	---	---	---	---	---	---	---	---
CCA-CON	---	---	---	---	---	---	---	---	---
CCA-COR	---	---	---	---	---	---	---	---	---
CCA-CICP	---	---	---	---	---	---	---	---	---
ECONOMIC DEVELOPMENT									
ED	---	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION									
EI	---	---	---	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---	---	---	---
CEIC	---	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES									
EMR	72,857	55,550	128,407	91,637	80,735	172,372	119,100	92,561	211,661
EMR-ENER	420	45,431	45,851	1,045	64,706	65,751	3,184	71,975	75,159
EMR-MES	72,437	10,119	82,556	90,592	16,029	106,621	115,916	20,586	136,502
AECB	240	535	775	270	829	1,099	311	1,760	2,071
AECL	68,819	10,029	78,848	82,431	13,771	96,202	95,428	15,077	110,505
NEB	---	---	---	---	---	---	---	---	---
ENVIRONMENT									
ENV	67,287	20,049	87,336	78,222	22,267	100,489	96,942	22,643	119,585
ENV-ADM	399	---	399	432	---	432	475	---	475
ENV-ES	66,779	19,809	86,588	77,671	22,004	99,675	96,335	22,349	118,684
ENV-EPS	2,306	3,082	5,388	2,398	2,950	5,348	2,923	4,185	7,108
ENV-AES	18,091	769	18,860	21,796	831	22,627	25,923	884	26,807
ENV-ECS	15,589	1,221	16,810	16,893	1,357	18,250	19,453	1,497	20,950
ENV-FOR	30,793	14,737	45,530	36,584	16,866	53,450	48,036	15,783	63,819
ENV-PC	109	240	349	119	263	382	132	294	426
EXTERNAL AFFAIRS									
EA	---	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---	---
CIDA	146	8,449	8,595	170	9,539	9,709	187	10,875	11,062
IDRC	3,051	16,116	19,167	3,690	19,354	23,044	4,576	23,606	28,182
IJC	---	---	---	---	---	---	---	---	---
FINANCE									
FIN	---	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS									
F&O	50,209	6,475	56,684	54,871	8,286	63,157	53,108	10,859	63,967
F&O-FM	50,209	6,475	56,684	54,871	8,286	63,157	53,108	10,859	63,967
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	1,383	863	2,246	1,596	991	2,587	1,761	1,049	2,810
IAND-IIA	---	---	---	---	---	---	---	---	---
IAND-NA	1,383	863	2,246	1,596	991	2,587	1,761	1,049	2,810
INDUSTRY TRADE AND COMMERCE									
ITC	6,200	87,000	93,200	7,032	129,989	137,021	8,526	157,776	166,302
ITC-TI	6,150	85,822	91,972	6,977	128,906	135,883	8,466	156,776	165,242
ITC-TOUR	---	---	---	---	---	---	---	---	---
ITC-GO	50	1,178	1,228	55	1,083	1,138	60	1,000	1,060

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RESEARCH AND DEVELOPMENT

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	---	---	---	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---	---
LRC	---	---	---	---	---	---	---	---	---
LABOUR									
LAB	---	---	---	---	---	---	---	---	---
NATIONAL DEFENCE									
NDEF	71,039	28,741	99,780	72,718	36,109	108,827	81,040	54,985	136,025
NDEF-SER	71,039	28,741	99,780	72,718	36,109	108,827	81,040	54,985	136,025
NATIONAL HEALTH AND WELFARE									
NHW	12,409	7,172	19,581	14,002	9,056	23,058	15,348	7,958	23,306
NHW-ADM	---	---	---	---	---	---	---	---	---
NHW-HSS	318	5,948	6,266	434	6,289	6,723	448	5,300	5,748
NHW-MS	1,745	341	2,086	2,918	1,000	3,918	2,167	---	2,167
NHW-HP	10,346	883	11,229	10,650	1,767	12,417	12,733	2,658	15,391
NHW-IS	---	---	---	---	---	---	---	---	---
MRC	1,435	78,026	79,461	1,618	95,231	96,849	1,821	107,325	109,146
NATIONAL REVENUE									
NREV	---	---	---	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---	---	---	---
PRIVY COUNCIL									
PC	---	---	---	---	---	---	---	---	---
COL	---	---	---	---	---	---	---	---	---
ECC	---	---	---	---	---	---	---	---	---
PUBLIC WORKS									
PW	1,318	2,942	4,260	353	1,055	1,408	777	1,603	2,380
PW-PTS	1,318	2,942	4,260	353	1,055	1,408	777	1,603	2,380
CMHC	1,380	435	1,815	1,900	847	2,747	2,110	930	3,040
NCC	---	---	---	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION									
REE	---	---	---	---	---	---	---	---	---
SCIENCE AND TECHNOLOGY									
ST	---	1,358	1,358	---	1,553	1,553	---	1,895	1,895
NRC	126,182	63,795	189,977	153,342	101,655	254,997	194,891	117,557	312,448
NRC-SIR	126,182	63,795	189,977	153,342	101,655	254,997	194,891	117,557	312,448
NRC-STI	---	---	---	---	---	---	---	---	---
NSERC	2,677	143,561	146,238	3,450	176,573	180,023	4,548	197,936	202,484
SC	---	---	---	---	---	---	---	---	---
SECRETARY OF STATE									
SECS	---	---	---	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---	---	---	---
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	---	---	---	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---	---	---	---
RCMP	---	71	71	150	145	295	150	150	300
SUPPLY AND SERVICES									
SS	87	12,085	12,172	96	12,280	12,376	105	12,282	12,387
SS-SUPP	87	12,085	12,172	96	12,280	12,376	105	12,282	12,387
STCAN	---	---	---	---	---	---	---	---	---
TRANSPORT									
TPT	1,598	3,634	5,232	2,744	6,228	8,972	4,256	11,326	15,582
TPT-ADM	693	2,890	3,583	1,216	4,340	5,556	1,184	4,855	6,039
TPT-MAR	602	719	1,321	945	1,864	2,809	2,024	6,421	8,445
TPT-AIR	303	---	303	583	---	583	1,048	---	1,048
TPT-SUR	---	25	25	---	24	24	---	50	50
CTC	---	---	---	---	---	---	---	---	---
TREASURY BOARD									
TB	---	---	---	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---	---	---	---
TOTAL	665,334	574,686	1,240,020	771,228	762,636	1,533,864	912,769	871,518	1,784,287

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT IN CANADIAN INDUSTRY BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
AGRICULTURE						
AGR	---	3,060	---	3,764	---	5,082
AGR-ADM	---	---	---	---	---	---
AGR-DEV	---	3,060	---	3,764	---	5,082
AGR-RI	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---
CDC	---	---	---	---	---	---
CLFB	---	---	---	---	---	---
COMMUNICATIONS						
COMM	9,231	6,966	11,738	10,370	2,305	6,160
COMM-COMM	9,231	6,966	11,738	10,370	2,305	6,160
COMM-AC	---	---	---	---	---	---
CBC	---	---	---	---	---	---
CRTC	---	---	---	---	---	---
NFB	---	---	---	---	---	---
NLIB	---	---	---	---	---	---
NMUS	---	---	---	---	---	---
PA	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS						
CCA	---	---	---	---	---	---
CCA-ADM	---	---	---	---	---	---
CCA-CON	---	---	---	---	---	---
CCA-COR	---	---	---	---	---	---
CCA-CICP	---	---	---	---	---	---
ECONOMIC DEVELOPMENT						
ED	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION						
EI	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---
CEIC	---	---	---	---	---	---
ENERGY MINES & RESOURCES						
EMR	16,274	4,929	16,302	10,827	11,637	14,417
EMR-ENER	16,274	331	16,302	2,281	11,637	3,848
EMR-MES	---	4,598	---	8,546	---	10,569
AECB	---	270	---	411	---	1,100
AECL	---	7,655	---	11,155	---	12,248
NEB	---	---	---	---	---	---
ENVIRONMENT						
ENV	3,600	9,617	3,600	10,477	2,300	9,924
ENV-ADM	---	---	---	---	---	---
ENV-ES	3,600	9,489	3,600	10,336	2,300	9,766
ENV-EPS	---	2,102	---	2,200	---	3,435
ENV-AES	---	---	---	---	---	---
ENV-ECS	---	187	---	185	---	231
ENV-FOR	3,600	7,200	3,600	7,951	2,300	6,100
ENV-PC	---	128	---	141	---	158
EXTERNAL AFFAIRS						
EA	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---
CIDA	---	---	---	---	---	---
IDRC	---	---	---	---	---	---
IJC	---	---	---	---	---	---
FINANCE						
FIN	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---
FISHERIES AND OCEANS						
F&O	---	3,350	---	5,238	---	7,092
F&O-FM	---	3,350	---	5,238	---	7,092
INDIAN AFFAIRS & NORTHERN DEVELOPMENT						
IAND	---	228	---	209	---	170
IAND-IIA	---	---	---	---	---	---
IAND-NA	---	228	---	209	---	170
INDUSTRY TRADE AND COMMERCE						
ITC	84,184	---	128,095	---	155,883	---
ITC-TI	83,416	---	127,413	---	155,283	---
ITC-TOUR	---	---	---	---	---	---
ITC-GO	768	---	682	---	600	---

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT

IN CANADIAN INDUSTRY

BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS.	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
JUSTICE						
JUST	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---
CHRC	---	---	---	---	---	---
LRC	---	---	---	---	---	---
LABOUR						
LAB	---	---	---	---	---	---
NATIONAL DEFENCE						
NDEF	---	22,972	---	29,708	---	47,093
NDEF-SER	---	22,972	---	29,708	---	47,093
NATIONAL HEALTH AND WELFARE						
NHW	---	122	---	245	---	325
NHW-ADM	---	---	---	---	---	---
NHW-HSS	---	107	---	142	---	180
NHW-MS	---	---	---	---	---	---
NHW-HP	---	15	---	103	---	145
NHW-IS	---	---	---	---	---	---
MRC	---	---	---	---	---	---
NATIONAL REVENUE						
NREV	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---
PRIVY COUNCIL						
PC	---	---	---	---	---	---
COL	---	---	---	---	---	---
ECC	---	---	---	---	---	---
PUBLIC WORKS						
PW	---	2,937	---	1,045	---	1,553
PW-PTS	---	2,937	---	1,045	---	1,553
CMHC	---	330	---	660	---	725
NCC	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION						
REE	---	---	---	---	---	---
SCIENCE AND TECHNOLOGY						
ST	---	---	---	---	---	---
NRC	22,088	23,932	35,460	38,630	45,652	48,123
NRC-SIR	22,088	23,932	35,460	38,630	45,652	48,123
NRC-STI	---	---	---	---	---	---
NSERC	---	---	---	---	---	---
SC	---	---	---	---	---	---
SECRETARY OF STATE						
SECS	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---
PSC	---	---	---	---	---	---
SOLICITOR GENERAL						
SGEN	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---
RCMP	---	42	---	60	---	90
SUPPLY AND SERVICES						
SS	---	10,552	---	10,683	---	10,685
SS-SUPP	---	10,552	---	10,683	---	10,685
STCAN	---	---	---	---	---	---
TRANSPORT						
TPT	---	3,248	---	5,816	---	10,849
TPT-ADM	---	2,595	---	3,952	---	4,428
TPT-MAR	---	645	---	1,864	---	6,421
TPT-AIR	---	---	---	---	---	---
TPT-SUR	---	---	---	---	---	---
CTC	---	---	---	---	---	---
TREASURY BOARD						
TB	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---
TOTAL	135,377	108,282	195,195	139,298	217,777	167,636

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT
IN CANADIAN UNIVERSITIES AND NON-PROFIT INSTITUTIONS
BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
AGRICULTURE						
AGR	1,373	2,776	1,386	3,485	1,386	4,849
AGR-ADM	---	---	---	---	---	---
AGR-DEV	1,373	2,776	1,386	3,485	1,386	4,849
AGR-RI	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---
CDC	---	---	---	---	---	---
CLFB	---	---	---	---	---	---
COMMUNICATIONS						
COMM	25	950	25	1,000	25	935
COMM-COMM	25	950	25	1,000	25	935
COMM-AC	---	---	---	---	---	---
CBC	---	---	---	---	---	---
CRTC	---	---	---	---	---	---
NFB	---	---	---	---	---	---
NLIB	---	---	---	---	---	---
NMUS	---	---	---	---	---	---
PA	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS						
CCA	---	---	---	---	---	---
CCA-ADM	---	---	---	---	---	---
CCA-CON	---	---	---	---	---	---
CCA-COR	---	---	---	---	---	---
CCA-CICP	---	---	---	---	---	---
ECONOMIC DEVELOPMENT						
ED	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION						
EI	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---
CEIC	---	---	---	---	---	---
ENERGY MINES & RESOURCES						
EMR	2,002	1,627	3,230	2,889	3,957	3,036
EMR-ENER	191	41	1,840	---	2,240	---
EMR-MES	1,811	1,586	1,390	2,889	1,717	3,036
AECB	---	222	---	369	---	560
AECL	---	1,781	---	1,900	---	2,136
NEB	---	---	---	---	---	---
ENVIRONMENT						
ENV	869	5,055	1,311	5,734	2,263	6,927
ENV-ADM	---	---	---	---	---	---
ENV-ES	869	4,978	1,311	5,650	2,263	6,833
ENV-EPS	---	751	---	390	---	390
ENV-AES	283	344	300	432	300	475
ENV-ECS	219	545	219	617	219	678
ENV-FOR	367	3,338	792	4,211	1,744	5,290
ENV-PC	---	77	---	84	---	94
EXTERNAL AFFAIRS						
EA	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---
CIDA	---	---	---	---	---	---
IDRC	207	---	495	---	1,013	---
IJC	---	---	---	---	---	---
FINANCE						
FIN	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---
FISHERIES AND OCEANS						
F&O	585	2,060	510	2,166	510	2,769
F&O-FM	585	2,060	510	2,166	510	2,769
INDIAN AFFAIRS & NORTHERN DEVELOPMENT						
IAND	297	336	420	360	493	384
IAND-IIA	---	---	---	---	---	---
IAND-NA	297	336	420	360	493	384
INDUSTRY TRADE AND COMMERCE						
ITC	1,346	---	1,751	---	1,750	---
ITC-TI	936	---	1,350	---	1,350	---
ITC-TOUR	---	---	---	---	---	---
ITC-GO	410	---	401	---	400	---

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT

IN CANADIAN UNIVERSITIES AND NON-PROFIT INSTITUTIONS

BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
JUSTICE						
JUST	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---
CHRC	---	---	---	---	---	---
LRC	---	---	---	---	---	---
LABOUR						
LAB	---	---	---	---	---	---
NATIONAL DEFENCE						
NDEF	---	2,805	---	4,210	---	5,026
NDEF-SER	---	2,805	---	4,210	---	5,026
NATIONAL HEALTH AND WELFARE						
NHW	5,717	469	6,044	312	5,045	1,100
NHW-ADM	---	---	---	---	---	---
NHW-HSS	5,695	---	6,029	---	5,030	---
NHW-MS	---	---	---	---	---	---
NHW-HP	22	469	15	312	15	1,100
NHW-IS	---	---	---	---	---	---
MRC	72,216	---	88,092	---	99,280	---
NATIONAL REVENUE						
NREV	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---
PRIVY COUNCIL						
PC	---	---	---	---	---	---
COL	---	---	---	---	---	---
ECC	---	---	---	---	---	---
PUBLIC WORKS						
PW	---	---	---	10	---	10
PW-PTS	---	---	---	10	---	10
CMHC	13	59	27	95	35	105
NCC	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION						
REE	---	---	---	---	---	---
SCIENCE AND TECHNOLOGY						
ST	---	---	---	---	---	---
NRC	13,642	1,461	18,199	3,059	22,201	2,640
NRC-SIR	13,642	1,461	18,199	3,059	22,201	2,640
NRC-STI	---	---	---	---	---	---
NSERC	138,333	---	166,551	---	184,562	---
SC	---	---	---	---	---	---
SECRETARY OF STATE						
SECS	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---
PSC	---	---	---	---	---	---
SOLICITOR GENERAL						
SGEN	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---
RCMP	---	29	---	85	---	60
SUPPLY AND SERVICES						
SS	---	1,092	---	1,082	---	1,082
SS-SUPP	---	1,092	---	1,082	---	1,082
STCAN	---	---	---	---	---	---
TRANSPORT						
TPT	25	161	24	320	50	353
TPT-ADM	---	161	---	320	---	353
TPT-MAR	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---
TPT-SUR	25	---	24	---	50	---
CTC	---	---	---	---	---	---
TREASURY BOARD						
TB	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---
TOTAL	236,650	20,883	288,065	27,076	322,570	31,972

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	6,522	1,745	8,267	7,453	921	8,374	8,274	4	8,278
AGR-ADM	4,200	---	4,200	4,783	---	4,783	5,084	---	5,084
AGR-DEV	793	1,741	2,534	812	917	1,729	921	---	921
AGR-RI	---	---	---	---	---	---	---	---	---
AGR-CGC	1,529	4	1,533	1,858	4	1,862	2,269	4	2,273
CDC	---	593	593	---	2,200	2,200	---	2,500	2,500
CLFB	---	---	---	---	---	---	---	---	---
COMMUNICATIONS									
COMM	70	---	70	70	---	70	100	---	100
COMM-COMM	70	---	70	70	---	70	100	---	100
COMM-AC	---	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---	---
CRTC	---	---	---	---	---	---	---	---	---
NFB	252	---	252	176	---	176	200	---	200
NLIB	---	---	---	---	---	---	---	---	---
NMUS	13,909	3,820	17,729	14,794	4,045	18,839	16,320	4,668	20,988
PA	---	---	---	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS									
CCA	14,545	---	14,545	14,972	---	14,972	17,731	---	17,731
CCA-ADM	---	---	---	---	---	---	---	---	---
CCA-CON	2,170	---	2,170	2,435	---	2,435	2,850	---	2,850
CCA-COR	12,375	---	12,375	12,537	---	12,537	14,881	---	14,881
CCA-CICP	---	---	---	---	---	---	---	---	---
ECONOMIC DEVELOPMENT									
ED	---	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION									
EI	---	---	---	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---	---	---	---
CEIC	---	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES									
EMR	36,346	5,884	42,230	39,932	6,938	46,870	47,048	10,126	57,174
EMR-ENER	329	248	577	239	2,002	2,241	682	3,061	3,743
EMR-MES	36,017	5,636	41,653	39,693	4,936	44,629	46,366	7,065	53,431
AECB	---	---	---	---	---	---	---	---	---
AECL	5,310	12,614	17,924	5,528	12,452	17,980	7,154	14,725	21,879
NEB	382	---	382	495	---	495	501	---	501
ENVIRONMENT									
ENV	135,352	8,963	144,315	151,492	10,037	161,529	184,727	10,372	195,099
ENV-ADM	1,180	---	1,180	1,189	---	1,189	1,207	---	1,207
ENV-ES	133,190	8,728	141,918	149,222	9,777	158,999	182,317	10,082	192,399
ENV-EPS	3,047	325	3,372	2,535	287	2,822	2,605	287	2,892
ENV-AES	93,740	3,233	96,973	107,744	3,736	111,480	134,380	3,563	137,943
ENV-ECS	31,653	5,170	36,823	34,100	5,754	39,854	39,789	6,232	46,021
ENV-FOR	4,750	---	4,750	4,843	---	4,843	5,543	---	5,543
ENV-PC	982	235	1,217	1,081	260	1,341	1,207	290	1,493
EXTERNAL AFFAIRS									
EA	---	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---	---
CIDA	414	23,225	23,639	484	25,546	26,030	530	28,102	28,632
IDRC	240	703	943	269	1,126	1,395	308	1,406	1,714
IJC	2,249	79	2,328	2,657	114	2,771	2,786	202	2,988
FINANCE									
FIN	---	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS									
F&O	53,678	2,541	56,219	59,224	4,160	63,384	70,893	7,141	78,034
F&O-FM	53,678	2,541	56,219	59,224	4,160	63,384	70,893	7,141	78,034
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	753	21	774	758	23	781	838	25	863
IAND-IIA	---	---	---	---	---	---	---	---	---
IAND-NA	753	21	774	758	23	781	838	25	863
INDUSTRY TRADE AND COMMERCE									
ITC	---	2,728	2,728	---	3,590	3,590	---	4,273	4,273
ITC-TI	---	2,728	2,728	---	3,590	3,590	---	4,273	4,273
ITC-TOUR	---	---	---	---	---	---	---	---	---
ITC-GO	---	---	---	---	---	---	---	---	---

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	---	---	---	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---	---
LRC	---	---	---	---	---	---	---	---	---
LABOUR									
LAB	---	---	---	---	---	---	---	---	---
NATIONAL DEFENCE									
NDEF	754	---	754	866	---	866	970	---	970
NDEF-SER	754	---	754	866	---	866	970	---	970
NATIONAL HEALTH AND WELFARE									
NHW	26,538	2,628	29,166	28,692	2,179	30,871	34,659	2,219	36,878
NHW-ADM	---	---	---	---	---	---	---	---	---
NHW-HSS	227	2,203	2,430	210	1,798	2,008	227	1,780	2,007
NHW-MS	---	---	---	---	---	---	---	---	---
NHW-HP	26,311	425	26,736	28,482	381	28,863	34,432	439	34,871
NHW-IS	---	---	---	---	---	---	---	---	---
MRC	121	2,449	2,570	139	3,179	3,318	155	3,583	3,739
NATIONAL REVENUE									
NREV	---	---	---	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---	---	---	---
PRIVY COUNCIL									
PC	---	---	---	---	---	---	---	---	---
COL	---	---	---	---	---	---	---	---	---
ECC	---	---	---	---	---	---	---	---	---
PUBLIC WORKS									
PW	2,626	1,424	4,050	5,158	1,091	6,249	4,731	1,027	5,758
PW-PTS	2,626	1,424	4,050	5,158	1,091	6,249	4,731	1,027	5,758
CMHC	697	614	1,311	830	1,207	2,037	944	1,231	2,175
NCC	160	---	160	250	---	250	425	---	425
REGIONAL ECONOMIC EXPANSION									
REE	---	771	771	---	957	957	---	5,588	5,588
SCIENCE AND TECHNOLOGY									
ST	---	---	---	---	---	---	---	---	---
NRC	33,619	2,506	36,125	40,020	2,357	42,377	45,578	2,666	48,244
NRC-SIR	18,961	2,506	21,467	21,496	2,291	23,787	23,987	2,592	26,579
NRC-STI	14,658	---	14,658	18,524	66	18,590	21,591	74	21,665
NSERC	669	15,964	16,633	862	20,918	21,780	1,138	23,459	24,597
SC	---	---	---	---	---	---	---	---	---
SECRETARY OF STATE									
SECS	---	---	---	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---	---	---	---
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	---	---	---	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---	---	---	---
RCMP	---	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES									
SS	16	2,203	2,219	17	2,168	2,185	19	2,168	2,187
SS-SUPP	16	2,203	2,219	17	2,168	2,185	19	2,168	2,187
STCAN	---	---	---	---	---	---	---	---	---
TRANSPORT									
TPT	6,921	3,964	10,885	6,494	4,597	11,091	1,969	4,730	6,699
TPT-ADM	443	1,127	1,570	793	1,884	2,677	958	2,123	3,081
TPT-MAR	6,464	728	7,192	5,518	600	6,118	866	600	1,466
TPT-AIR	5	2,099	2,104	157	2,103	2,260	119	1,997	2,116
TPT-SUR	9	10	19	26	10	36	26	10	36
CTC	---	---	---	---	---	---	---	---	---
TREASURY BOARD									
TB	---	---	---	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---	---	---	---
TOTAL	342,143	95,444	437,587	381,632	109,805	491,437	447,998	130,215	578,213

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1980-81

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	5	1,817	123	1,046	433	1,367	---	3,991
AGR-ADM	---	41	21	4	46	---	---	112
AGR-DEV	5	918	100	934	375	1,327	---	3,659
AGR-RI	---	40	1	53	4	38	---	136
AGR-CGC	---	18	1	55	8	2	---	84
CDC	---	---	---	---	---	---	---	---
CLFB	---	---	---	---	---	---	---	---
COMMUNICATIONS								
COMM	9	267	42	149	86	66	---	559
COMM-COMM	9	267	42	149	86	66	---	559
COMM-AC	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---
CRTC	---	---	---	---	---	---	---	---
NFB	---	3	---	8	1	---	---	12
NLIB	---	---	---	---	---	---	---	---
NMUS	3	29	67	93	45	90	---	327
PA	---	---	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS								
CCA	2	181	15	24	161	3	---	386
CCA-ADM	---	---	---	---	---	---	---	---
CCA-CON	1	11	8	24	6	3	---	53
CCA-COR	1	170	7	---	155	---	---	333
CCA-CICP	---	---	---	---	---	---	---	---
ECONOMIC DEVELOPMENT								
ED	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION								
EI	---	---	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---	---	---
CEIC	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES								
EMR	8	884	87	859	317	165	---	2,318
EMR-ENER	1	17	---	---	4	---	---	22
EMR-MES	7	867	87	859	313	165	---	2,296
AECB	---	6	---	---	1	---	---	7
AECL	17	643	---	849	315	570	---	2,394
NEB	---	8	---	1	2	---	---	11
ENVIRONMENT								
ENV	43	1,526	378	1,939	666	120	---	4,672
ENV-ADM	---	12	13	---	20	---	---	45
ENV-ES	43	1,493	366	1,939	645	117	---	4,602
ENV-EPS	2	78	3	55	15	10	---	162
ENV-AES	21	635	171	1,127	350	31	---	2,335
ENV-ECS	7	315	160	248	274	76	---	1,080
ENV-FOR	13	465	32	509	6	---	---	1,025
ENV-PC	---	21	---	---	1	3	---	25
EXTERNAL AFFAIRS								
EA	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---
CIDA	---	---	9	---	7	---	---	16
IDRC	2	32	1	2	29	---	---	66
IJC	7	11	4	3	20	---	---	45
FINANCE								
FIN	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS								
F&O	5	822	77	773	117	249	---	2,043
F&O-FM	5	822	77	773	117	249	---	2,043
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	---	38	3	6	1	1	---	49
IAND-IIA	---	---	---	---	---	---	---	---
IAND-NA	---	38	3	6	1	1	---	49
INDUSTRY TRADE AND COMMERCE								
ITC	---	2	106	---	54	---	---	162
ITC-TI	---	2	104	---	53	---	---	159
ITC-TOUR	---	---	---	---	---	---	---	---
ITC-GO	---	---	2	---	1	---	---	3

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1980-81

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
JUSTICE								
JUST	---	---	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---
LRC	---	---	---	---	---	---	---	---
LABOUR								
LAB	---	---	---	---	---	---	---	---
NATIONAL DEFENCE								
NDEF	12	533	111	487	235	271	153	1,802
NDEF-SER	12	533	111	487	235	271	153	1,802
NATIONAL HEALTH AND WELFARE								
NHW	8	583	32	334	201	18	---	1,175
NHW-ADM	---	---	---	---	---	---	---	---
NHW-HSS	1	4	6	1	4	---	---	16
NHW-MS	---	27	---	---	6	---	---	33
NHW-HP	7	552	27	333	198	18	---	1,126
NHW-IS	---	---	---	---	---	---	---	---
MRC	5	2	8	---	24	---	---	39
NATIONAL REVENUE								
NREV	---	---	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---	---	---
PRIVY COUNCIL								
PC	---	---	---	---	---	---	---	---
COL	---	---	---	---	---	---	---	---
ECC	---	---	---	---	---	---	---	---
PUBLIC WORKS								
PW	---	45	7	9	1	---	---	63
PW-PTS	---	45	7	9	1	---	---	63
CMHC	2	19	1	10	6	---	---	38
NCC	---	---	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION								
REE	---	---	---	---	---	---	---	---
SCIENCE AND TECHNOLOGY								
ST	---	---	---	---	---	---	---	---
NRC	5	1,109	207	958	583	296	---	3,158
NRC-SIR	5	1,050	176	957	455	292	---	2,935
NRC-STI	---	59	31	1	128	4	---	223
NSERC	4	1	29	---	41	---	---	75
SC	---	---	---	---	---	---	---	---
SECRETARY OF STATE								
SECS	---	---	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---	---	---
PSC	---	---	---	---	---	---	---	---
SOLICITOR GENERAL								
SGEN	---	---	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---	---	---
RCMP	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES								
SS	0	---	2	---	2	---	---	4
SS-SUPP	0	---	2	---	2	---	---	4
STCAN	---	---	---	---	---	---	---	---
TRANSPORT								
TPT	1	47	14	3	11	---	---	76
TPT-ADM	1	14	10	2	11	---	---	38
TPT-MAR	---	21	---	---	---	---	---	21
TPT-AIR	---	12	4	1	---	---	---	17
TPT-SUR	---	---	---	---	---	---	---	---
CTC	---	---	---	---	---	---	---	---
TREASURY BOARD								
TB	---	---	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---	---	---
TOTAL	138	7,747	1,322	7,553	3,359	3,216	153	23,486

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1981-82

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	7	1,032	130	1,162	439	1,379	---	4,149
AGR-ADM	---	37	26	7	47	---	---	117
AGR-DEV	6	925	102	1,042	377	1,339	---	3,791
AGR-RI	---	51	1	55	4	38	---	149
AGR-CGC	1	19	1	58	11	2	---	92
CDC	---	---	---	---	---	---	---	---
CLFB	---	---	---	---	---	---	---	---
COMMUNICATIONS								
COMM	9	209	53	146	90	71	---	578
COMM-COMM	9	209	53	146	90	71	---	578
COMM-AC	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---
CRTC	---	---	---	---	---	---	---	---
NFB	---	2	---	7	1	---	---	10
NLIB	---	---	---	---	---	---	---	---
NMUS	3	29	65	93	50	80	---	320
PA	---	---	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS								
CCA	2	158	27	26	174	3	---	390
CCA-ADM	---	---	---	---	---	---	---	---
CCA-CON	1	10	8	26	7	3	---	55
CCA-COR	1	148	19	---	167	---	---	335
CCA-CICP	---	---	---	---	---	---	---	---
ECONOMIC DEVELOPMENT								
ED	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION								
EI	---	---	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---	---	---
CEIC	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES								
EMR	12	894	91	816	313	165	---	2,291
EMR-ENER	2	13	---	---	6	---	---	20
EMR-MES	10	882	91	816	308	165	---	2,271
AECB	---	6	---	---	1	---	---	7
AECL	17	723	---	848	318	606	---	2,512
NEB	---	8	---	1	2	---	---	11
ENVIRONMENT								
ENV	44	1,531	380	1,946	660	120	---	4,681
ENV-ADM	---	13	13	---	16	---	---	41
ENV-ES	44	1,496	367	1,946	643	117	---	4,613
ENV-EPS	2	77	3	55	15	10	---	161
ENV-AES	21	635	171	1,129	348	31	---	2,335
ENV-ECS	7	315	160	248	274	76	---	1,080
ENV-FOR	14	469	33	514	6	---	---	1,037
ENV-PC	---	23	---	---	1	3	---	27
EXTERNAL AFFAIRS								
EA	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---
CIDA	---	---	9	---	7	---	---	16
IDRC	3	40	2	1	29	---	---	74
IJC	7	10	4	4	21	---	---	46
FINANCE								
FIN	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS								
F&O	8	880	77	773	127	310	---	2,175
F&O-FM	8	880	77	773	127	310	---	2,175
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	---	39	4	6	2	1	---	51
IAND-IIA	---	---	---	---	---	---	---	---
IAND-NA	---	39	4	6	2	1	---	51
INDUSTRY TRADE AND COMMERCE								
ITC	---	2	106	---	54	---	---	162
ITC-TI	---	2	104	---	53	---	---	159
ITC-TOUR	---	---	---	---	---	---	---	---
ITC-GO	---	---	2	---	1	---	---	3

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1981-82

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
JUSTICE								
JUST	---	---	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---
LRC	---	---	---	---	---	---	---	---
LABOUR								
LAB	---	---	---	---	---	---	---	---
NATIONAL DEFENCE								
NDEF	12	546	98	494	231	268	161	1,809
NDEF-SER	12	546	98	494	231	268	161	1,809
NATIONAL HEALTH AND WELFARE								
NHW	10	608	37	335	212	24	---	1,225
NHW-ADM	---	---	---	---	---	---	---	---
NHW-HSS	1	4	7	1	5	---	---	18
NHW-MS	---	27	---	---	6	---	---	33
NHW-HP	9	578	30	334	201	24	---	1,175
NHW-IS	---	---	---	---	---	---	---	---
MRC	5	2	8	---	24	---	---	39
NATIONAL REVENUE								
NREV	---	---	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---	---	---
PRIVY COUNCIL								
PC	---	---	---	---	---	---	---	---
COL	---	---	---	---	---	---	---	---
ECC	---	---	---	---	---	---	---	---
PUBLIC WORKS								
PW	---	42	9	9	2	---	---	63
PW-PTS	---	42	9	9	2	---	---	63
CMHC	2	19	1	10	7	---	---	39
NCC	---	---	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION								
REE	---	---	---	---	---	---	---	---
SCIENCE AND TECHNOLOGY								
ST	---	---	---	---	---	---	---	---
NRC	5	1,152	211	986	595	299	---	3,248
NRC-SIR	5	1,085	179	985	467	295	---	3,016
NRC-STI	---	67	32	1	128	4	---	232
NSERC	4	1	31	---	45	---	---	81
SC	---	---	---	---	---	---	---	---
SECRETARY OF STATE								
SECS	---	---	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---	---	---
PSC	---	---	---	---	---	---	---	---
SOLICITOR GENERAL								
SGEN	---	---	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---	---	---
RCMP	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES								
SS	0	---	2	---	2	---	---	4
SS-SUPP	0	---	2	---	2	---	---	4
STCAN	---	---	---	---	---	---	---	---
TRANSPORT								
TPT	1	51	14	4	11	---	---	81
TPT-ADM	1	13	10	2	11	---	---	37
TPT-MAR	---	29	---	---	---	---	---	29
TPT-AIR	---	9	4	2	---	---	---	15
TPT-SUR	---	---	---	---	---	---	---	---
CTC	---	---	---	---	---	---	---	---
TREASURY BOARD								
TB	---	---	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---	---	---
TOTAL	150	7,984	1,356	7,667	3,417	3,326	161	24,062

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1982-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	32	1,087	109	1,047	422	1,372	---	3,989
AGR-ADM	---	38	31	7	46	---	---	122
AGR-DEV	32	900	76	925	361	1,332	---	3,626
AGR-RI	---	51	1	55	4	38	---	149
AGR-CGC	---	18	1	60	11	2	---	92
CDC	---	---	---	---	---	---	---	---
CLFB	---	---	---	---	---	---	---	---
COMMUNICATIONS								
COMM	9	217	53	165	101	79	---	624
COMM-COMM	9	217	53	165	101	79	---	624
COMM-AC	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---
CRTC	---	---	---	---	---	---	---	---
NFB	---	3	---	8	1	---	---	12
NLIB	---	---	---	---	---	---	---	---
NMUS	4	27	68	90	73	71	---	333
PA	---	---	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS								
CCA	2	162	30	27	166	3	---	390
CCA-ADM	---	---	---	---	---	---	---	---
CCA-CON	1	10	11	27	6	3	---	58
CCA-COR	1	152	19	---	160	---	---	332
CCA-CICP	---	---	---	---	---	---	---	---
ECONOMIC DEVELOPMENT								
ED	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION								
EI	---	---	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---	---	---
CEIC	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES								
EMR	28	953	94	846	329	163	---	2,411
EMR-ENER	4	37	---	---	8	---	---	48
EMR-MES	24	917	94	846	321	163	---	2,363
AECB	---	6	---	---	1	---	---	7
AECL	18	736	---	898	342	621	---	2,615
NEB	---	8	---	1	2	---	---	11
ENVIRONMENT								
ENV	40	1,428	417	1,812	782	215	---	4,693
ENV-ADM	---	13	13	---	16	---	---	41
ENV-ES	40	1,393	404	1,812	765	212	---	4,625
ENV-EPS	2	77	4	55	24	10	---	171
ENV-AES	21	640	174	1,130	346	31	---	2,342
ENV-ECS	7	315	160	248	274	76	---	1,080
ENV-FOR	10	361	66	379	121	95	---	1,032
ENV-PC	---	23	---	---	1	3	---	27
EXTERNAL AFFAIRS								
EA	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---
CIDA	---	---	5	---	7	---	---	16
IDRC	3	46	2	---	32	---	---	82
IJC	7	10	6	4	22	---	---	49
FINANCE								
FIN	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS								
F&O	8	915	106	773	174	316	---	2,292
F&O-FM	8	915	106	773	174	316	---	2,292
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	---	39	4	6	2	1	---	51
IAND-IIA	---	---	---	---	---	---	---	---
IAND-NA	---	39	4	6	2	1	---	51
INDUSTRY TRADE AND COMMERCE								
ITC	---	2	116	---	58	---	---	176
ITC-TI	---	2	115	---	57	---	---	174
ITC-TOUR	---	---	---	---	---	---	---	---
ITC-GO	---	---	1	---	1	---	---	2

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1982-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY
JUSTICE							
JUST	---	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---
LRC	---	---	---	---	---	---	---
LABOUR							
LAB	---	---	---	---	---	---	---
NATIONAL DEFENCE							
NDEF	12	547	98	495	231	267	161
NDEF-SER	12	547	98	495	231	267	161
NATIONAL HEALTH AND WELFARE							
NHW	10	625	37	342	214	19	---
NHW-ADM	---	---	---	---	---	---	---
NHW-HSS	1	4	7	1	5	---	---
NHW-NS	---	29	---	---	6	---	---
NHW-HP	9	593	30	341	203	19	---
NHW-IS	---	---	---	---	---	---	---
MRC	5	2	8	---	24	---	---
NATIONAL REVENUE							
NREV	---	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---	---
PRIVY COUNCIL							
PC	---	---	---	---	---	---	---
COL	---	---	---	---	---	---	---
ECC	---	---	---	---	---	---	---
PUBLIC WORKS							
PW	---	40	10	2	7	---	---
PW-PTS	---	40	10	2	7	---	---
CMHC	2	19	1	10	7	---	---
NCC	---	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION							
REE	---	---	---	---	---	---	---
SCIENCE AND TECHNOLOGY							
ST	---	---	---	---	---	---	---
NRC	6	1,182	220	1,042	590	301	---
NRC-SIR	6	1,112	188	1,041	464	296	---
NRC-STI	---	70	32	1	126	5	---
NSERC	4	---	42	---	52	---	---
SC	---	---	---	---	---	---	---
SECRETARY OF STATE							
SECS	---	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---	---
PSC	---	---	---	---	---	---	---
SOLICITOR GENERAL							
SGEN	---	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---	---
RCMP	---	---	---	---	---	---	---
SUPPLY AND SERVICES							
SS	0	---	2	---	2	---	---
SS-SUPP	0	---	2	---	2	---	---
STCAN	---	---	---	---	---	---	---
TRANSPORT							
TPT	1	40	14	5	11	---	---
TPT-ADM	1	13	10	2	11	---	---
TPT-MAR	---	17	---	---	---	---	---
TPT-AIR	---	10	4	3	---	---	---
TPT-SUR	---	---	---	---	---	---	---
CTC	---	---	---	---	---	---	---
TREASURY BOARD							
TB	---	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---	---
TOTAL	189	8,015	1,444	7,572	3,650	3,428	161

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	66	5,586	550	4,684	1,602	2,647	143	15,278
INTRAMURAL RSA	55	1,957	540	2,833	1,502	543	0	7,429
ADMIN. OF EXTRAMURAL PROGRAMS	17	204	232	35	255	26	10	779
TOTAL	138	7,747	1,322	7,553	3,359	3,216	153	23,486
1981-82								
INTRAMURAL R&D	71	5,808	548	4,808	1,619	2,694	151	15,699
INTRAMURAL RSA	59	1,966	569	2,818	1,529	604	0	7,546
ADMIN. OF EXTRAMURAL PROGRAMS	20	210	239	41	269	28	10	817
TOTAL	150	7,984	1,356	7,667	3,417	3,326	161	24,062
1982-83								
INTRAMURAL R&D	112	5,867	524	4,726	1,754	2,762	151	15,896
INTRAMURAL RSA	56	1,911	615	2,797	1,685	633	0	7,617
ADMIN. OF EXTRAMURAL PROGRAMS	21	237	305	49	291	33	10	945
TOTAL	189	8,015	1,444	7,572	3,650	3,428	161	24,458

3

Human Sciences

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	343,506	(77.4)	465,544	(80.4)	447,894	(77.4)
INDUSTRY	13,465	(3.0)	16,547	(2.9)	18,885	(3.3)
UNIVERSITIES	45,983	(10.4)	52,342	(9.0)	61,735	(10.7)
NON-PROFIT INSTITUTIONS	10,791	(2.4)	11,898	(2.1)	12,298	(2.1)
PROVINCIAL & MUNICIPAL	7,422	(1.7)	8,357	(1.4)	10,341	(1.8)
FOREIGN	15,402	(3.5)	16,512	(2.9)	19,378	(3.3)
OTHER CANADIAN	7,078	(1.6)	8,022	(1.4)	8,408	(1.5)
TOTAL	443,647	(100.0)	579,222	(100.0)	578,939	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES
TOTAL ALL COMPONENTS

FISCAL YEAR 1980-81

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	28,708	0	0	0	0	0	0	28,708
R&D CONTRACTS	1,717	2,742	1,731	125	177	120	2,266	8,878
SUPPORTING CONTRACTS	990	0	0	0	0	0	0	990
R&D GRANTS	0	508	22,781	5,863	1,954	9,467	581	41,154
RESEARCH FELLOWSHIPS	0	0	5,995	0	0	723	203	6,921
ADMIN. EXTRAMURAL R&D	8,313	0	0	0	0	0	0	8,313
CAPITAL - R&D	108	0	0	0	0	0	0	108
SUB TOTAL R&D	39,836	3,250	30,507	5,988	2,131	10,310	3,050	95,072
DATA COLLECTION	122,379	3,982	538	248	215	0	625	127,987
INFORMATION SERVICES	56,694	836	2,720	3,065	1,577	686	376	65,954
ECONOMIC & FEAS. STUDIES	28,771	1,734	312	331	0	702	438	32,288
OPERN'S & POLICY STUDIES	50,924	3,220	323	576	0	39	1,206	56,288
EDUCATION SUPPORT	207	150	11,000	0	0	3,665	499	15,521
MUSEUM SERVICES	29,680	293	583	583	3,499	0	884	35,522
ADMIN. EXTRAMURAL RSA	5,819	0	0	0	0	0	0	5,819
CAPITAL - RSA	9,196	0	0	0	0	0	0	9,196
SUB TOTAL RSA	303,670	10,215	15,476	4,803	5,291	5,092	4,028	348,575
TOTAL	343,506	13,465	45,983	10,791	7,422	15,402	7,078	443,647

FISCAL YEAR 1981-82

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	34,713	0	0	0	0	0	0	34,713
R&D CONTRACTS	1,375	3,683	1,802	160	542	105	3,290	10,957
SUPPORTING CONTRACTS	1,368	0	0	0	0	0	0	1,368
R&D GRANTS	0	902	26,263	5,924	1,923	9,632	646	45,290
RESEARCH FELLOWSHIPS	0	0	6,571	0	0	644	169	7,384
ADMIN. EXTRAMURAL R&D	9,676	0	0	0	0	0	0	9,676
CAPITAL - R&D	85	0	0	0	0	0	0	85
SUB TOTAL R&D	47,217	4,585	34,636	6,084	2,465	10,381	4,105	109,473
DATA COLLECTION	202,558	5,125	696	468	215	0	895	209,957
INFORMATION SERVICES	68,080	1,118	3,186	3,145	2,107	1,060	461	79,157
ECONOMIC & FEAS. STUDIES	39,603	1,877	277	1,200	17	742	483	44,199
OPERN'S & POLICY STUDIES	63,331	3,396	594	410	0	23	533	68,287
EDUCATION SUPPORT	300	150	12,362	0	8	4,306	648	17,774
MUSEUM SERVICES	30,982	296	591	591	3,545	0	897	36,902
ADMIN. EXTRAMURAL RSA	7,023	0	0	0	0	0	0	7,023
CAPITAL - RSA	6,450	0	0	0	0	0	0	6,450
SUB TOTAL RSA	418,327	11,962	17,706	5,814	5,892	6,131	3,917	469,749
TOTAL	465,544	16,547	52,342	11,898	8,357	16,512	8,022	579,222

FISCAL YEAR 1982-83

($ THOUSANDS)

	INTRAMRL	CANADIAN INDUSTRY	CANADIAN UNIVERSITY	CANADIAN N-P INST	PROV. MUN. GOVERNMENTS	FOREIGN PERFORMERS	OTHER PERFORMERS	TOTAL
IN-HOUSE R&D	39,514	0	0	0	0	0	0	39,514
R&D CONTRACTS	1,822	4,250	2,206	150	2,729	101	3,099	15,157
SUPPORTING CONTRACTS	1,690	0	0	0	0	0	0	1,690
R&D GRANTS	0	753	32,900	6,013	1,586	11,620	587	53,459
RESEARCH FELLOWSHIPS	0	0	7,387	0	0	762	205	8,274
ADMIN. EXTRAMURAL R&D	12,157	0	0	0	0	0	0	12,157
CAPITAL - R&D	164	0	0	0	0	0	0	164
SUB TOTAL R&D	55,347	5,003	42,413	6,163	4,315	12,483	4,691	130,415
DATA COLLECTION	150,819	5,933	664	463	229	0	430	158,538
INFORMATION SERVICES	79,997	1,374	3,831	3,222	2,110	1,213	479	92,226
ECONOMIC & FEAS. STUDIES	44,228	2,148	199	1,346	3	858	490	49,264
OPERN'S & POLICY STUDIES	71,214	3,978	564	490	0	0	738	76,984
EDUCATION SUPPORT	331	150	13,450	0	0	4,824	736	19,491
MUSEUM SERVICES	31,050	307	614	614	3,684	0	844	37,113
ADMIN. EXTRAMURAL RSA	8,176	0	0	0	0	0	0	8,176
CAPITAL - RSA	6,732	0	0	0	0	0	0	6,732
SUB TOTAL RSA	392,547	13,882	19,322	6,135	6,026	6,895	3,717	448,524
TOTAL	447,894	18,885	61,735	12,298	10,341	19,378	8,408	578,939

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	50	1,200	1,250	50	1,688	1,738	50	1,738	1,788
AGR-ADM	---	---	---	---	---	---	---	---	---
AGR-DEV	50	1,200	1,250	50	1,688	1,738	50	1,738	1,788
AGR-RI	---	---	---	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---	---	---	---
CDC	---	---	---	---	---	---	---	---	---
CLFB	71	18	89	71	21	92	117	28	145
COMMUNICATIONS									
COMM	193	5,215	5,408	714	5,430	6,144	560	5,551	6,111
COMM-COMM	193	4,558	4,751	714	4,447	5,161	560	4,736	5,296
COMM-AC	---	657	657	---	983	983	---	815	815
CBC	---	3,636	3,636	---	4,042	4,042	---	4,607	4,607
CRTC	602	---	602	679	---	679	819	---	819
NFB	---	---	---	---	---	---	---	---	---
NLIB	---	17,245	17,245	---	21,609	21,609	---	25,842	25,842
NMUS	1,809	33,395	35,204	3,586	34,057	37,643	5,098	34,388	39,486
PA	---	10,817	10,817	---	11,960	11,960	---	13,689	13,689
SSHRC	25,568	16,810	42,378	27,874	18,727	46,601	35,726	20,950	56,676
CONSUMER AND CORPORATE AFFAIRS									
CCA	2,662	217	2,879	3,623	523	4,146	4,637	807	5,444
CCA-ADM	---	---	---	3,032	---	3,032	3,855	---	3,855
CCA-CON	1,411	---	1,411	---	---	---	---	---	---
CCA-COR	788	---	788	---	---	---	---	---	---
CCA-CICP	463	217	680	591	523	1,114	782	807	1,589
ECONOMIC DEVELOPMENT									
ED	---	1,677	1,677	---	2,038	2,038	---	2,493	2,493
EMPLOYMENT & IMMIGRATION									
EI	1,528	8,001	9,529	1,477	8,125	9,602	1,568	8,612	10,180
EI-ADM	1,528	8,001	9,529	1,477	8,125	9,602	1,568	8,612	10,180
CEIC	---	7,758	7,758	---	9,255	9,255	---	8,126	8,126
ENERGY MINES & RESOURCES									
EMR	1,638	6,784	8,422	1,865	8,592	10,457	2,811	8,834	11,645
EMR-ENER	---	2,100	2,100	---	2,350	2,350	---	2,690	2,690
EMR-MES	1,638	4,684	6,322	1,865	6,242	8,107	2,811	6,144	8,955
AECB	---	---	---	---	---	---	---	---	---
AECL	---	---	---	---	---	---	---	---	---
NEB	---	1,307	1,307	---	1,681	1,681	---	1,689	1,689
ENVIRONMENT									
ENV	840	14,659	15,499	914	16,086	17,000	1,083	18,336	19,419
ENV-ADM	---	261	261	---	308	308	---	438	438
ENV-ES	723	3,469	4,192	785	3,757	4,542	938	4,533	5,471
ENV-EPS	---	---	---	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---	---	---	---
ENV-ECS	723	3,469	4,192	785	3,757	4,542	938	4,533	5,471
ENV-FOR	---	---	---	---	---	---	---	---	---
ENV-PC	117	10,929	11,046	129	12,021	12,150	145	13,365	13,510
EXTERNAL AFFAIRS									
EA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
EA-CIA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
CIDA	1,449	2,808	4,257	1,606	3,030	4,636	1,784	3,496	5,280
IDRC	14,003	5,685	19,688	14,793	6,807	21,600	18,402	8,328	26,730
IJC	---	---	---	---	---	---	---	---	---
FINANCE									
FIN	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FIN-FEP	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FISHERIES AND OCEANS									
F&O	825	2,675	3,500	854	2,576	3,430	946	2,846	3,792
F&O-FM	825	2,675	3,500	854	2,576	3,430	946	2,846	3,792
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	1,177	760	1,937	1,161	1,893	3,054	1,348	1,877	3,225
IAND-IIA	---	---	---	2	378	380	13	382	395
IAND-NA	1,177	760	1,937	1,159	1,515	2,674	1,335	1,495	2,830
INDUSTRY TRADE AND COMMERCE									
ITC	989	573	1,562	2,322	613	2,935	2,326	413	2,739
ITC-TI	742	475	1,217	2,051	505	2,556	2,055	305	2,360
ITC-TOUR	247	98	345	271	108	379	271	108	379
ITC-GO	---	---	---	---	---	---	---	---	---

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
JUSTICE									
JUST	1,950	2,331	4,281	3,022	2,990	6,012	4,852	3,262	8,114
JUST-ADM	1,950	779	2,729	3,022	890	3,912	4,852	1,162	6,014
JUST-CUIO	---	1,552	1,552	---	2,100	2,100	---	2,100	2,100
CHRC	---	304	304	---	288	288	---	325	325
LRC	913	553	1,466	1,467	882	2,349	1,750	1,188	2,938
LABOUR									
LAB	603	3,210	3,813	662	3,529	4,191	745	3,979	4,724
NATIONAL DEFENCE									
NDEF	713	1,324	2,037	797	1,536	2,333	898	1,677	2,575
NDEF-SER	713	1,324	2,037	797	1,536	2,333	898	1,677	2,575
NATIONAL HEALTH AND WELFARE									
NHW	7,987	7,078	15,065	8,746	9,939	18,685	9,269	11,458	20,727
NHW-ADM	1,677	4,297	5,974	2,161	5,900	8,061	2,522	6,477	8,999
NHW-HSS	6,310	2,250	8,560	6,585	3,427	10,012	6,747	4,064	10,811
NHW-MS	---	---	---	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---	---	---	---
NHW-IS	---	531	531	---	612	612	---	917	917
MRC	---	---	---	---	---	---	---	---	---
NATIONAL REVENUE									
NREV	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
NREV-TAX	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
PRIVY COUNCIL									
PC	549	---	549	589	---	589	89	---	89
COL	---	975	975	---	1,172	1,172	---	3,097	3,097
ECC	7,019	1,011	8,030	6,440	952	7,392	6,814	1,000	7,814
PUBLIC WORKS									
PW	---	---	---	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---	---	---	---
CMHC	2,758	6,696	9,454	3,300	7,731	11,031	3,455	8,216	11,671
NCC	10	82	92	16	321	337	10	199	209
REGIONAL ECONOMIC EXPANSION									
REE	872	840	1,712	1,071	1,259	2,330	1,258	1,439	2,697
SCIENCE AND TECHNOLOGY									
ST	---	7,004	7,004	---	8,035	8,035	---	8,917	8,917
NRC	---	---	---	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---	---	---	---
NSERC	---	---	---	---	---	---	---	---	---
SC	1,498	1,392	2,890	1,912	1,630	3,542	2,201	1,846	4,047
SECRETARY OF STATE									
SECS	5,845	3,228	9,073	5,992	4,025	10,017	6,415	4,526	10,941
SECS-OL	480	373	853	509	307	816	724	307	1,031
SECS-ES	---	139	139	---	415	415	---	895	895
SECS-TRA	2,868	2,253	5,121	3,200	2,481	5,681	3,108	2,227	5,335
SECS-CIT	2,497	463	2,960	2,283	822	3,105	2,583	1,097	3,680
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	2,415	1,760	4,175	3,013	2,656	5,669	3,013	2,156	5,169
SGEN-ADM	2,415	1,760	4,175	3,013	2,656	5,669	3,013	2,156	5,169
RCMP	---	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES									
SS	211	351	562	198	358	556	196	358	554
SS-SUPP	211	351	562	198	358	556	196	358	554
STCAN	5,828	138,306	144,134	8,108	221,857	229,965	9,324	177,895	187,219
TRANSPORT									
TPT	118	916	1,034	148	1,152	1,300	195	1,474	1,669
TPT-ADM	17	916	933	28	1,152	1,180	30	1,474	1,504
TPT-MAR	---	---	---	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---	---	---	---
TPT-SUR	101	---	101	120	---	120	165	---	165
CTC	1,439	1,319	2,758	1,462	1,253	2,715	1,732	1,523	3,255
TREASURY BOARD									
TB	113	10,553	10,666	113	12,814	12,927	128	15,316	15,444
TB-ADM	113	10,553	10,666	113	12,814	12,927	128	15,316	15,444
TOTAL	95,072	348,575	443,647	109,473	469,749	579,222	130,415	448,524	578,939

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	1,250	---	1,250	1,700	38	1,738	1,725	63	1,788
AGR-ADM	---	---	---	---	---	---	---	---	---
AGR-DEV	1,250	---	1,250	1,700	38	1,738	1,725	63	1,788
AGR-RI	---	---	---	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---	---	---	---
CDC	---	---	---	---	---	---	---	---	---
CLFB	69	20	89	82	10	92	100	45	145
COMMUNICATIONS									
COMM	4,152	1,256	5,408	4,221	1,923	6,144	4,326	1,785	6,111
COMM-COMM	3,767	384	4,751	3,672	1,489	5,161	3,876	1,420	5,296
COMM-AC	385	272	657	549	434	983	450	365	815
CBC	1,738	1,898	3,636	1,867	2,175	4,042	2,123	2,484	4,607
CRTC	534	68	602	519	160	679	569	250	819
NFB	---	---	---	---	---	---	---	---	---
NLIB	17,225	20	17,245	21,536	73	21,609	25,796	46	25,842
NMUS	29,204	6,000	35,204	31,559	6,084	37,643	33,230	6,256	39,486
PA	10,817	---	10,817	11,960	---	11,960	13,689	---	13,689
SSHRC	4,002	38,376	42,378	4,451	42,150	46,601	5,328	51,348	56,676
CONSUMER AND CORPORATE AFFAIRS									
CCA	2,076	803	2,879	2,659	1,487	4,146	3,720	1,724	5,444
CCA-ADM	---	---	---	2,045	987	3,032	2,761	1,094	3,855
CCA-CON	852	559	1,411	---	---	---	---	---	---
CCA-COR	705	83	788	---	---	---	---	---	---
CCA-CICP	519	161	680	614	500	1,114	959	630	1,589
ECONOMIC DEVELOPMENT									
ED	1,527	150	1,677	1,888	150	2,038	2,343	150	2,493
EMPLOYMENT & IMMIGRATION									
EI	8,638	891	9,529	8,733	869	9,602	9,272	908	10,180
EI-ADM	8,638	891	9,529	8,733	869	9,602	9,272	908	10,180
CEIC	4,573	3,185	7,758	8,436	819	9,255	7,326	800	8,126
ENERGY MINES & RESOURCES									
EMR	6,219	2,203	8,422	7,957	2,500	10,457	8,105	3,540	11,645
EMR-ENER	1,490	610	2,100	1,670	680	2,350	1,910	780	2,690
EMR-MES	4,729	1,593	6,322	6,287	1,820	8,107	6,195	2,760	8,955
AECB	---	---	---	---	---	---	---	---	---
AECL	---	---	---	---	---	---	---	---	---
NEB	1,295	12	1,307	1,648	33	1,681	1,689	---	1,689
ENVIRONMENT									
ENV	14,892	607	15,499	16,332	668	17,000	18,635	784	19,419
ENV-ADM	261	---	261	308	---	308	438	---	438
ENV-ES	3,767	425	4,192	4,074	468	4,542	4,910	561	5,471
ENV-EPS	---	---	---	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---	---	---	---
ENV-ECS	3,767	425	4,192	4,074	468	4,542	4,910	561	5,471
ENV-FOR	---	---	---	---	---	---	---	---	---
ENV-PC	10,864	182	11,046	11,950	200	12,150	13,287	223	13,510
EXTERNAL AFFAIRS									
EA	4,317	1,612	5,929	4,888	1,762	6,650	5,282	1,938	7,220
EA-CIA	4,317	1,612	5,929	4,888	1,762	6,650	5,282	1,938	7,220
CIDA	1,638	2,619	4,257	1,763	2,873	4,636	2,093	3,187	5,280
IDRC	8,761	10,927	19,688	10,221	11,379	21,600	12,540	14,190	26,730
IJC	---	---	---	---	---	---	---	---	---
FINANCE									
FIN	8,514	---	8,514	10,077	---	10,077	12,613	---	12,613
FIN-FEP	8,514	---	8,514	10,077	---	10,077	12,613	---	12,613
FISHERIES AND OCEANS									
F&O	3,200	300	3,500	3,130	300	3,430	3,470	322	3,792
F&O-FM	3,200	300	3,500	3,130	300	3,430	3,470	322	3,792
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	1,319	618	1,937	1,683	1,371	3,054	1,603	1,622	3,225
IAND-IIA	---	---	---	80	300	380	95	300	395
IAND-NA	1,319	618	1,937	1,603	1,071	2,674	1,508	1,322	2,830
INDUSTRY TRADE AND COMMERCE									
ITC	236	1,326	1,562	259	2,676	2,935	263	2,476	2,739
ITC-TI	47	1,170	1,217	51	2,505	2,556	55	2,305	2,360
ITC-TOUR	189	156	345	208	171	379	208	171	379
ITC-GO	---	---	---	---	---	---	---	---	---

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	2,497	1,784	4,281	3,451	2,561	6,012	4,311	3,803	8,114
JUST-ADM	945	1,784	2,729	1,351	2,561	3,912	2,211	3,803	6,014
JUST-CUIO	1,552	---	1,552	2,100	---	2,100	2,100	---	2,100
CHRC	304	---	304	288	---	288	325	---	325
LRC	542	924	1,466	689	1,660	2,349	870	2,068	2,938
LABOUR									
LAB	3,446	367	3,813	3,790	401	4,191	4,272	452	4,724
NATIONAL DEFENCE									
NDEF	1,912	125	2,037	2,170	163	2,333	2,417	158	2,575
NDEF-SER	1,912	125	2,037	2,170	163	2,333	2,417	158	2,575
NATIONAL HEALTH AND WELFARE									
NHW	5,900	9,165	15,065	7,773	10,912	18,685	9,006	11,721	20,727
NHW-ADM	4,254	1,720	5,974	5,826	2,235	8,061	6,744	2,255	8,999
NHW-HSS	1,115	7,445	8,560	1,335	8,677	10,012	1,345	9,466	10,811
NHW-MS	---	---	---	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---	---	---	---
NHW-IS	531	---	531	612	---	612	917	---	917
MRC	---	---	---	---	---	---	---	---	---
NATIONAL REVENUE									
NREV	4,486	---	4,486	10,718	---	10,718	6,986	---	6,986
NREV-TAX	4,486	---	4,486	10,718	---	10,718	6,986	---	6,986
PRIVY COUNCIL									
PC	---	549	549	---	589	589	---	89	89
COL	975	---	975	1,172	---	1,172	3,097	---	3,097
ECC	7,497	533	8,030	6,902	490	7,392	7,319	495	7,814
PUBLIC WORKS									
PW	---	---	---	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---	---	---	---
CMHC	6,231	3,223	9,454	6,295	4,736	11,031	6,835	4,836	11,671
NCC	43	49	92	131	206	337	69	140	209
REGIONAL ECONOMIC EXPANSION									
REE	820	892	1,712	1,011	1,319	2,330	1,198	1,499	2,697
SCIENCE AND TECHNOLOGY									
ST	6,472	532	7,004	7,549	486	8,035	8,382	535	8,917
NRC	---	---	---	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---	---	---	---
NSERC	---	---	---	---	---	---	---	---	---
SC	2,504	386	2,890	2,937	605	3,542	3,357	690	4,047
SECRETARY OF STATE									
SECS	4,742	4,331	9,073	5,724	4,293	10,017	5,453	5,488	10,941
SECS-OL	71	782	853	91	725	816	91	940	1,031
SECS-ES	139	---	139	415	---	415	465	430	895
SECS-TRA	4,459	662	5,121	5,141	540	5,681	4,545	790	5,335
SECS-CIT	73	2,887	2,960	77	3,028	3,105	352	3,328	3,680
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	1,525	2,650	4,175	1,610	3,859	5,669	1,810	3,359	5,169
SGEN-ADM	1,525	2,650	4,175	1,810	3,859	5,669	1,810	3,359	5,169
RCMP	---	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES									
SS	4	558	562	4	552	556	4	550	554
SS-SUPP	4	558	562	4	552	556	4	550	554
STCAN	144,044	90	144,134	229,844	121	229,965	187,110	109	187,219
TRANSPORT									
TPT	483	551	1,034	666	634	1,300	1,140	529	1,669
TPT-ADM	393	540	933	571	609	1,180	975	529	1,504
TPT-MAR	---	---	---	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---	---	---	---
TPT-SUR	90	11	101	95	25	120	165	---	165
CTC	2,330	428	2,758	2,237	478	2,715	2,777	478	3,255
TREASURY BOARD									
TB	10,553	113	10,666	12,814	113	12,927	15,316	128	15,444
TB-ADM	10,553	113	10,666	12,814	113	12,927	15,316	128	15,444
TOTAL	343,506	100,141	443,647	465,544	113,678	579,222	447,894	131,045	578,939

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INTRAMURAL, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	50	1,200	1,250	50	1,650	1,700	50	1,675	1,725
AGR-DEV	50	1,200	1,250	50	1,650	1,700	50	1,675	1,725
CLFB	51	18	69	61	21	82	77	23	100
COMMUNICATIONS									
COMM	---	4,152	4,152	---	4,221	4,221	---	4,326	4,326
COMM-COMM	---	3,767	3,767	---	3,672	3,672	---	3,876	3,876
COMM-AC	---	385	385	---	549	549	---	450	450
CBC	---	1,738	1,738	---	1,867	1,867	---	2,123	2,123
CRTC	534	---	534	519	---	519	569	---	569
NLIB	---	17,225	17,225	---	21,536	21,536	---	25,796	25,796
NMUS	1,640	27,564	29,204	3,410	28,149	31,559	4,893	28,337	33,230
PA	---	10,817	10,817	---	11,960	11,960	---	13,689	13,689
SSHRC	2,054	1,948	4,002	2,269	2,182	4,451	2,998	2,330	5,328
CONSUMER AND CORPORATE AFFAIRS									
CCA	2,020	56	2,076	2,601	58	2,659	3,543	177	3,720
CCA-ADM	---	---	0	2,045	---	2,045	2,761	---	2,761
CCA-CON	852	---	852	---	---	0	---	---	0
CCA-COR	705	---	705	---	---	0	---	---	0
CCA-CICP	463	56	519	556	58	614	782	177	959
ECONOMIC DEVELOPMENT									
ED	---	1,527	1,527	---	1,888	1,888	---	2,343	2,343
EMPLOYMENT & IMMIGRATION									
EI	1,465	7,173	8,638	1,428	7,305	8,733	1,518	7,754	9,272
EI-ADM	1,465	7,173	8,638	1,428	7,305	8,733	1,518	7,754	9,272
CEIC	---	4,573	4,573	---	8,436	8,436	---	7,326	7,326
ENERGY MINES & RESOURCES									
EMR	45	6,174	6,219	45	7,912	7,957	51	8,054	8,105
EMR-ENER	---	1,490	1,490	---	1,670	1,670	---	1,910	1,910
EMR-MES	45	4,684	4,729	45	6,242	6,287	51	6,144	6,195
NEB	---	1,295	1,295	---	1,648	1,648	---	1,689	1,689
ENVIRONMENT									
ENV	640	14,252	14,892	679	15,653	16,332	815	17,820	18,635
ENV-ADM	---	261	261	---	308	308	---	438	438
ENV-ES	640	3,127	3,767	679	3,395	4,074	815	4,095	4,910
ENV-ECS	640	3,127	3,767	679	3,395	4,074	815	4,095	4,910
ENV-PC	---	10,864	10,864	---	11,950	11,950	---	13,287	13,287
EXTERNAL AFFAIRS									
EA	---	4,317	4,317	---	4,888	4,888	---	5,282	5,282
EA-CIA	---	4,317	4,317	---	4,888	4,888	---	5,282	5,282
CIDA	224	1,414	1,638	266	1,497	1,763	284	1,809	2,093
IDRC	4,247	4,514	8,761	4,965	5,256	10,221	6,126	6,414	12,540
FINANCE									
FIN	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FIN-FEP	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FISHERIES AND OCEANS									
F&O	825	2,375	3,200	854	2,276	3,130	946	2,524	3,470
F&O-FM	825	2,375	3,200	854	2,276	3,130	946	2,524	3,470
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	630	689	1,319	700	983	1,683	571	1,032	1,603
IAND-IIA	---	---	0	2	78	80	13	82	95
IAND-NA	630	689	1,319	698	905	1,603	558	950	1,508
INDUSTRY TRADE AND COMMERCE									
ITC	138	98	236	151	108	259	155	108	263
ITC-TI	47	---	47	51	---	51	55	---	55
ITC-TOUR	91	98	189	100	108	208	100	108	208

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INTRAMURAL, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
JUSTICE									
JUST	677	1,820	2,497	1,813	2,438	3,451	1,825	2,486	4,311
JUST-ADM	677	268	945	1,813	338	1,351	1,825	386	2,211
JUST-CUIO	---	1,552	1,552	---	2,100	2,100	---	2,100	2,100
CHRC	---	304	304	---	288	288	---	325	325
LRC	246	296	542	387	302	689	511	359	870
LABOUR									
LAB	411	3,035	3,446	452	3,338	3,790	509	3,763	4,272
NATIONAL DEFENCE									
NDEF	713	1,199	1,912	797	1,373	2,170	898	1,519	2,417
NDEF-SER	713	1,199	1,912	797	1,373	2,170	898	1,519	2,417
NATIONAL HEALTH AND WELFARE									
NHW	2,147	3,753	5,900	2,633	5,140	7,773	2,998	6,088	9,086
NHW-ADM	1,527	2,727	4,254	1,996	3,830	5,826	2,337	4,407	6,744
NHW-HSS	620	495	1,115	637	698	1,335	661	684	1,345
NHW-IS	---	531	531	---	612	612	---	917	917
NATIONAL REVENUE									
NREV	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
NREV-TAX	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
PRIVY COUNCIL									
COL	---	975	975	---	1,172	1,172	---	3,097	3,097
ECC	6,486	1,011	7,497	5,950	952	6,902	6,319	1,080	7,319
PUBLIC WORKS									
CMHC	1,620	4,611	6,231	1,650	4,645	6,295	1,780	5,055	6,835
NCC	---	43	43	---	131	131	---	69	69
REGIONAL ECONOMIC EXPANSION									
REE	820	---	820	1,011	---	1,011	1,198	---	1,198
SCIENCE AND TECHNOLOGY									
ST	---	6,472	6,472	---	7,549	7,549	---	8,392	8,302
SC	1,112	1,392	2,504	1,307	1,630	2,937	1,511	1,846	3,357
SECRETARY OF STATE									
SECS	2,378	2,364	4,742	2,950	2,774	5,724	2,608	2,845	5,453
SECS-OL	---	71	71	---	91	91	---	91	91
SECS-ES	---	139	139	---	415	415	---	465	465
SECS-TRA	2,378	2,081	4,459	2,950	2,191	5,141	2,608	1,937	4,545
SECS-CIT	---	73	73	---	77	77	---	352	352
SOLICITOR GENERAL									
SGEN	775	750	1,525	938	872	1,810	938	872	1,810
SGEN-ADM	775	750	1,525	938	872	1,810	938	872	1,810
SUPPLY AND SERVICES									
SS	1	3	4	1	3	4	1	3	4
SS-SUPP	1	3	4	1	3	4	1	3	4
STCAN	5,828	138,216	144,044	8,108	221,736	229,844	9,324	177,786	187,110
TRANSPORT									
TPT	93	390	483	102	564	666	173	967	1,140
TPT-ADM	3	390	393	7	564	571	8	967	975
TPT-SUR	90	---	90	95	---	95	165	---	165
CTC	1,139	1,191	2,330	1,092	1,145	2,237	1,362	1,415	2,777
TREASURY BOARD									
TB	---	10,553	10,553	---	12,814	12,814	---	15,316	15,316
TB-ADM	---	10,553	10,553	---	12,814	12,814	---	15,316	15,316
TOTAL	39,836	303,670	343,506	47,217	418,327	465,544	55,347	392,547	447,894

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

INDUSTRY, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
AGR	---	---	0	---	25	25	---	50	50
AGR-DEV	---	---	0	---	25	25	---	50	50
CLFB	---	---	0	---	---	0	20	5	25
COMMUNICATIONS									
COMM	193	984	1,177	714	1,089	1,803	560	1,130	1,690
COMM-COMM	193	736	929	714	705	1,419	560	790	1,350
COMM-AC	---	248	248	---	384	384	---	340	340
CBC	---	1,898	1,898	---	2,175	2,175	---	2,484	2,484
CRTC	---	---	0	---	---	0	50	---	50
NMUS	---	292	292	---	295	295	---	307	307
CONSUMER AND CORPORATE AFFAIRS									
CCA	122	70	192	209	150	359	233	200	433
CCA-ADM	---	---	0	209	---	209	233	---	233
CCA-CON	99	---	99	---	---	0	---	---	0
CCA-COR	23	---	23	---	---	0	---	---	0
CCA-CICP	---	70	70	---	150	150	---	200	200
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
EI	7	718	725	49	820	869	50	858	908
EI-ADM	7	718	725	49	820	869	50	858	908
CEIC	---	1,701	1,701	---	779	779	---	800	800
ENERGY MINES & RESOURCES									
EMR	---	610	610	---	680	680	---	780	780
EMR-ENEK	---	610	610	---	680	680	---	780	780
ENVIRONMENT									
ENV	39	290	329	54	318	372	62	383	445
ENV-ES	11	289	300	23	317	340	27	383	410
ENV-ECS	11	289	300	23	317	340	27	383	410
ENV-PC	28	1	29	31	1	32	35	---	35
EXTERNAL AFFAIRS									
FINANCE									
FISHERIES AND OCEANS									
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	194	20	214	52	33	85	418	100	518
IAND-NA	194	20	214	52	33	85	418	100	518
INDUSTRY TRADE AND COMMERCE									
ITC	156	---	156	171	---	171	171	---	171
ITC-TOUR	156	---	156	171	---	171	171	---	171
JUSTICE									
LRC	---	257	257	---	580	580	---	829	829
LABOUR									
LAB	45	75	120	49	82	131	55	93	148
NATIONAL DEFENCE									
NDEF	---	72	72	---	85	85	---	82	82
NDEF-SER	---	72	72	---	85	85	---	82	82
NATIONAL HEALTH AND WELFARE									
NHW	99	---	99	75	540	615	90	976	1,066
NHW-HSS	99	---	99	75	540	615	90	976	1,066
NATIONAL REVENUE									
PRIVY COUNCIL									
ECC	296	---	296	300	---	300	300	---	300
PUBLIC WORKS									
CMHC	1,015	597	1,612	1,490	878	2,368	1,520	898	2,418
NCC	---	34	34	---	190	190	---	130	130
REGIONAL ECONOMIC EXPANSION									
REE	52	626	678	60	1,046	1,106	60	1,230	1,290
SCIENCE AND TECHNOLOGY									
SC	152	---	152	247	---	247	282	---	282
SECRETARY OF STATE									
SECS	---	302	302	---	550	550	---	980	980
SECS-OL	---	302	302	---	200	200	---	200	200
SECS-ES	---	---	0	---	---	0	---	430	430
SECS-CIT	---	---	0	---	350	350	---	350	350
SOLICITOR GENERAL									
SGEN	635	685	1,320	833	615	1,448	850	615	1,465
SGEN-ADM	635	685	1,320	833	615	1,448	850	615	1,465
SUPPLY AND SERVICES									
SS	95	348	443	82	355	437	82	355	437
SS-SUPP	95	348	443	82	355	437	82	355	437
TRANSPORT									
TPT	---	508	508	---	569	569	---	489	489
TPT-ADM	---	508	508	---	569	569	---	489	489
CTC	150	128	278	200	108	308	200	108	308
TREASURY BOARD									
TOTAL	3,250	10,215	13,465	4,585	11,962	16,547	5,003	13,882	18,885

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

UNIVERSITY, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81 R&D	1980-81 RSA	1980-81 TOTAL	1981-82 R&D	1981-82 RSA	1981-82 TOTAL	1982-83 R&D	1982-83 RSA	1982-83 TOTAL
AGRICULTURE									
AGR	---	---	0	---	13	13	---	13	13
AGR-DEV	---	---	0	---	13	13	---	13	13
CLFB	3	---	3	---	---	0	---	---	0
COMMUNICATIONS									
COMM	---	57	57	---	100	100	---	95	95
COMM-COMM	---	33	33	---	60	60	---	70	70
COMM-AC	---	24	24	---	40	40	---	25	25
CRTC	---	---	0	40	---	40	85	---	85
NMUS	---	583	583	---	591	591	---	614	614
SSHRC	23,514	9,749	33,263	25,605	11,045	36,650	32,728	12,430	45,158
CONSUMER AND CORPORATE AFFAIRS									
CCA	74	10	84	245	100	345	277	100	377
CCA-ADM	---	---	0	245	---	245	277	---	277
CCA-CON	20	---	20	---	---	0	---	---	0
CCA-COR	54	---	54	---	---	0	---	---	0
CCA-CICP	---	10	10	---	100	100	---	100	100
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
EI	---	10	10	---	---	0	---	---	0
EI-ADM	---	10	10	---	---	0	---	---	0
CEIC	---	18	18	---	17	17	---	---	0
ENERGY MINES & RESOURCES									
EMR	125	---	125	125	---	125	125	---	125
EMR-MES	125	---	125	125	---	125	125	---	125
ENVIRONMENT									
ENV	63	---	63	60	---	60	70	---	70
ENV-ES	63	---	63	60	---	60	70	---	70
ENV-ECS	63	---	63	60	---	60	70	---	70
EXTERNAL AFFAIRS									
EA	---	1,480	1,480	---	1,620	1,620	---	1,782	1,782
EA-CIA	---	1,480	1,480	---	1,620	1,620	---	1,782	1,782
CIDA	350	1,232	1,582	400	1,355	1,755	400	1,491	1,891
IDRC	25	---	25	202	23	225	542	31	573
FINANCE									
FISHERIES AND OCEANS									
F&O	---	100	100	---	100	100	---	100	100
F&O-FM	---	100	100	---	100	100	---	100	100
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	117	22	139	167	33	200	194	15	209
IAND-NA	117	22	139	167	33	200	194	15	209
INDUSTRY TRADE AND COMMERCE									
ITC	695	475	1,170	2,000	505	2,505	2,000	305	2,305
ITC-TI	695	475	1,170	2,000	505	2,505	2,000	305	2,305
JUSTICE									
JUST	---	32	32	---	46	46	---	51	51
JUST-ADM	---	32	32	---	46	46	---	51	51
LABOUR									
LAB	125	45	170	137	49	186	154	55	209
NATIONAL DEFENCE									
NDEF	---	53	53	---	78	78	---	76	76
NDEF-SER	---	53	53	---	78	78	---	76	76
NATIONAL HEALTH AND WELFARE									
NHW	3,509	923	4,432	3,787	1,041	4,828	3,774	1,159	4,933
NHW-ADM	150	---	150	165	---	165	185	---	185
NHW-HSS	3,359	923	4,282	3,622	1,041	4,663	3,589	1,159	4,748
NATIONAL REVENUE									
PRIVY COUNCIL									
PC	49	---	49	53	---	53	8	---	0
ECC	197	---	197	150	---	150	150	---	150
PUBLIC WORKS									
CMHC	17	628	645	35	912	947	35	935	970
REGIONAL ECONOMIC EXPANSION									
REE	---	19	19	---	4	4	---	---	0
SCIENCE AND TECHNOLOGY									
ST	---	2	2	---	---	0	---	---	0
SC	22	---	22	54	---	54	61	---	61
SECRETARY OF STATE									
SECS	490	---	490	250	55	305	500	55	555
SECS-TRA	490	---	490	250	---	250	500	---	500
SECS-CIT	---	---	0	---	55	55	---	55	55
SOLICITOR GENERAL									
SGEN	879	20	899	1,072	---	1,072	1,055	---	1,055
SGEN-ADM	879	20	899	1,072	---	1,072	1,055	---	1,055
SUPPLY AND SERVICES									
SS	114	---	114	88	---	88	88	---	88
SS-SUPP	114	---	114	88	---	88	88	---	88
TRANSPORT									
TPT	14	18	32	21	19	40	22	15	37
TPT-ADM	14	18	32	21	19	40	22	15	37
CTC	125	---	125	145	---	145	145	---	145
TREASURY BOARD									
TOTAL	30,507	15,476	45,983	34,636	17,706	52,342	42,413	19,322	61,735

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

NON-PROFIT INSTITUTIONS, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
COMMUNICATIONS									
COMM	---	8	8	---	20	20	---	---	0
COMM-COMM	---	8	8	---	10	10	---	---	0
COMM-AC	---	---	0	---	10	10	---	---	0
CRTC	34	---	34	35	---	35	40	---	40
NMUS	---	583	583	---	591	591	---	614	614
SSHRC	---	2,502	2,502	---	2,400	2,400	---	2,701	2,701
CONSUMER AND CORPORATE AFFAIRS									
CCA	11	---	11	13	---	13	14	---	14
CCA-ADM	---	---	0	13	---	13	14	---	14
CCA-CON	11	---	11	---	---	0	---	---	0
ECONOMIC DEVELOPMENT									
ED	---	150	150	---	150	150	---	150	150
EMPLOYMENT & IMMIGRATION									
EI	---	100	100	---	---	0	---	---	0
EI-ADM	---	100	100	---	---	0	---	---	0
ENERGY MINES & RESOURCES									
ENVIRONMENT									
EXTERNAL AFFAIRS									
IDRC	298	---	298	247	71	318	372	109	481
FINANCE									
FISHERIES AND OCEANS									
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	---	9	9	115	525	640	115	385	500
IAND-NA	---	9	9	115	525	640	115	385	500
INDUSTRY TRADE AND COMMERCE									
JUSTICE									
JUST	611	300	911	700	300	1,000	420	400	820
JUST-ADM	611	300	911	700	300	1,000	420	400	820
LRC	---	---	0	7	---	7	8	---	8
LABOUR									
LAB	15	---	15	16	---	16	18	---	18
NATIONAL DEFENCE									
NATIONAL HEALTH AND WELFARE									
NHW	1,888	670	2,558	1,961	903	2,864	2,098	903	3,001
NHW-HSS	1,888	670	2,558	1,961	903	2,864	2,098	903	3,001
NATIONAL REVENUE									
PRIVY COUNCIL									
PC	500	---	500	536	---	536	81	---	81
ECC	10	---	10	15	---	15	30	---	30
PUBLIC WORKS									
CMHC	47	331	378	40	514	554	35	533	568
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
SC	26	---	26	30	---	30	33	---	33
SECRETARY OF STATE									
SECS	2,409	140	2,549	2,224	340	2,564	2,739	340	3,079
SECS-OL	480	---	480	509	---	509	724	---	724
SECS-CIT	1,929	140	2,069	1,715	340	2,055	2,015	340	2,355
SOLICITOR GENERAL									
SGEN	26	10	36	32	---	32	32	---	32
SGEN-ADM	26	10	36	32	---	32	32	---	32
SUPPLY AND SERVICES									
TRANSPORT									
TREASURY BOARD									
TB	113	---	113	113	---	113	128	---	128
TB-ADM	113	---	113	113	---	113	128	---	128
TOTAL	5,988	4,803	10,791	6,084	5,814	11,898	6,163	6,135	12,298

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

PROVINCIAL & MUNICIPAL GOVERNMENTS, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
COMMUNICATIONS									
NMUS	---	3,499	3,499	---	3,545	3,545	---	3,684	3,684
CONSUMER AND CORPORATE AFFAIRS									
CCA	16	---	16	19	---	19	21	---	21
CCA-ADM	---	---	0	19	---	19	21	---	21
CCA-CON	16	---	16	---	---	0	---	---	0
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
EI	36	---	36	---	---	0	---	---	0
EI-ADM	36	---	36	---	---	0	---	---	0
ENERGY MINES & RESOURCES									
EMR	1,468	---	1,468	1,691	---	1,691	2,635	---	2,635
EMR-MES	1,468	---	1,468	1,691	---	1,691	2,635	---	2,635
ENVIRONMENT									
EXTERNAL AFFAIRS									
FINANCE									
FISHERIES AND OCEANS									
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	---	---	0	---	19	19	---	25	25
IAND-NA	---	---	0	---	19	19	---	25	25
INDUSTRY TRADE AND COMMERCE									
JUSTICE									
JUST	219	---	219	418	---	418	1,292	---	1,292
JUST-ADM	219	---	219	418	---	418	1,292	---	1,292
LABOUR									
NATIONAL DEFENCE									
NATIONAL HEALTH AND WELFARE									
NHW	257	1,570	1,827	153	2,106	2,259	184	2,090	2,274
NHW-ADM	---	1,570	1,570	---	2,070	2,070	---	2,070	2,070
NHW-HSS	257	---	257	153	36	189	184	20	204
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
CMHC	25	7	32	35	13	48	35	15	50
NCC	10	---	10	11	---	11	10	---	10
REGIONAL ECONOMIC EXPANSION									
REE	---	195	195	---	209	209	---	209	209
SCIENCE AND TECHNOLOGY									
SECRETARY OF STATE									
SOLICITOR GENERAL									
SGEN	100	20	120	138	---	138	138	---	138
SGEN-ADM	100	20	120	138	---	138	138	---	138
SUPPLY AND SERVICES									
TRANSPORT									
TPT	---	---	0	---	---	0	---	3	3
TPT-ADM	---	---	0	---	---	0	---	3	3
TREASURY BOARD									
TOTAL	2,131	5,291	7,422	2,465	5,892	8,357	4,315	6,026	10,341

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

FOREIGN, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
COMMUNICATIONS									
NLIB	---	20	20	---	73	73	---	46	46
SSHRC	---	2,611	2,611	---	3,100	3,100	---	3,400	3,400
CONSUMER AND CORPORATE AFFAIRS									
CCA	38	---	38	43	---	43	47	---	47
CCA-ADM	---	---	0	43	---	43	47	---	47
CCA-CON	38	---	38	---	---	0	---	---	0
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
EI	20	---	20	---	---	0	---	---	0
EI-ADM	20	---	20	---	---	0	---	---	0
CEIC	---	39	39	---	23	23	---	---	0
ENERGY MINES & RESOURCES									
ENVIRONMENT									
EXTERNAL AFFAIRS									
EA	---	132	132	---	142	142	---	156	156
EA-CIA	---	132	132	---	142	142	---	156	156
CIDA	875	162	1,037	940	178	1,118	1,100	106	1,206
IDRC	9,231	1,069	10,300	9,210	1,372	10,582	11,157	1,670	12,827
FINANCE									
FISHERIES AND OCEANS									
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
INDUSTRY TRADE AND COMMERCE									
JUSTICE									
LABOUR									
NATIONAL DEFENCE									
NATIONAL HEALTH AND WELFARE									
NHW	84	62	146	126	92	218	125	155	280
NHW-HSS	84	62	146	126	92	218	125	155	280
NATIONAL REVENUE									
PRIVY COUNCIL									
ECC	30	---	30	25	---	25	15	---	15
PUBLIC WORKS									
CMHC	---	338	338	---	495	495	---	499	499
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
ST	---	528	528	---	485	485	---	534	534
SC	7	---	7	12	---	12	14	---	14
SECRETARY OF STATE									
SOLICITOR GENERAL									
SGEN	---	50	50	---	50	50	---	50	50
SGEN-ADM	---	50	50	---	50	50	---	50	50
SUPPLY AND SERVICES									
STCAN	---	81	81	---	121	121	---	189	189
TRANSPORT									
CTC	25	---	25	25	---	25	25	---	25
TREASURY BOARD									
TOTAL	10,310	5,092	15,402	10,381	6,131	16,512	12,483	6,805	19,379

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

OTHER, BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
AGRICULTURE									
CLFB	17	---	17	10	---	10	20	---	20
COMMUNICATIONS									
COM	---	14	14	---	---	0	---	---	0
COM-COM	---	14	14	---	---	0	---	---	0
CRTC	34	---	34	85	---	85	75	---	75
NMUS	169	874	1,043	176	886	1,062	205	832	1,037
CONSUMER AND CORPORATE AFFAIRS									
CCA	381	81	462	493	215	708	502	330	832
CCA-ADM	---	---	0	458	---	458	502	---	502
CCA-CON	375	---	375	---	---	0	---	---	0
CCA-COR	6	---	6	---	---	0	---	---	0
CCA-CICP	---	81	81	35	215	250	---	330	330
ECONOMIC DEVELOPMENT									
EMPLOYMENT & IMMIGRATION									
CEIC	---	1,427	1,427	---	---	0	---	---	0
ENERGY MINES & RESOURCES									
EMR	---	---	0	4	---	4	---	---	0
EMR-MES	---	---	0	4	---	4	---	---	0
NEB	---	12	12	---	33	33	---	---	0
ENVIRONMENT									
ENV	98	117	215	121	115	236	136	133	269
ENV-ES	9	53	62	23	45	68	26	55	81
ENV-ECS	9	53	62	23	45	68	26	55	81
ENV-PC	89	64	153	98	70	168	110	78	188
EXTERNAL AFFAIRS									
IDRC	202	102	304	169	85	254	205	104	309
FINANCE									
FISHERIES AND OCEANS									
F&O	---	200	200	---	200	200	---	222	222
F&O-FM	---	200	200	---	200	200	---	222	222
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	236	20	256	127	300	427	50	320	370
IAND-IIA	---	---	0	---	300	300	---	300	300
IAND-NA	236	20	256	127	---	127	50	20	70
INDUSTRY TRADE AND COMMERCE									
JUSTICE									
JUST	443	179	622	891	206	1,097	1,315	325	1,640
JUST-ADM	443	179	622	891	206	1,097	1,315	325	1,640
LRC	667	---	667	1,073	---	1,073	1,231	---	1,231
LABOUR									
LAB	7	55	62	8	60	68	9	68	77
NATIONAL DEFENCE									
NATIONAL HEALTH AND WELFARE									
NHW	3	100	103	11	117	128	---	167	167
NHW-HSS	3	100	103	11	117	128	---	167	167
NATIONAL REVENUE									
PRIVY COUNCIL									
PUBLIC WORKS									
CMHC	34	184	218	50	274	324	50	290	340
NCC	---	5	5	5	---	5	---	---	0
REGIONAL ECONOMIC EXPANSION									
SCIENCE AND TECHNOLOGY									
ST	---	2	2	---	1	1	---	1	1
SC	179	---	179	262	---	262	300	---	300
SECRETARY OF STATE									
SECS	568	422	990	568	306	874	568	306	874
SECS-OL	---	---	0	---	16	16	---	16	16
SECS-TRA	---	172	172	---	290	290	---	290	290
SECS-CIT	568	250	818	568	---	568	568	---	568
SOLICITOR GENERAL									
SGEN	---	225	225	---	1,119	1,119	---	619	619
SGEN-ADM	---	225	225	---	1,119	1,119	---	619	619
SUPPLY AND SERVICES									
SS	1	---	1	27	---	27	25	---	25
SS-SUPP	1	---	1	27	---	27	25	---	25
STCAN	---	9	9	---	---	0	---	---	0
TRANSPORT									
TPT	11	---	11	25	---	25	---	---	0
TPT-SUR	11	---	11	25	---	25	---	---	0
TREASURY BOARD									
TOTAL	3,050	4,028	7,078	4,105	3,917	8,022	4,691	3,717	8,408

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON RESEARCH AND DEVELOPMENT

BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	39,836	(41.9)	47,217	(43.1)	55,347	(42.4)
INDUSTRY	3,250	(3.4)	4,585	(4.2)	5,003	(3.8)
UNIVERSITIES	30,587	(32.1)	34,636	(31.6)	42,413	(32.5)
NON-PROFIT INSTITUTIONS	5,988	(6.3)	6,084	(5.6)	6,163	(4.7)
PROVINCIAL & MUNICIPAL	2,131	(2.2)	2,465	(2.3)	4,315	(3.3)
FOREIGN	10,310	(10.8)	10,381	(9.5)	12,483	(9.6)
OTHER CANADIAN	3,050	(3.2)	4,105	(3.7)	4,691	(3.6)
TOTAL	95,072	(100.0)	109,473	(100.0)	130,415	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES

BY PERFORMER, 1980-1983

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	303,670	(87.1)	418,327	(89.1)	392,547	(87.5)
INDUSTRY	10,215	(2.9)	11,962	(2.5)	13,882	(3.1)
UNIVERSITIES	15,476	(4.4)	17,706	(3.8)	19,322	(4.3)
NON-PROFIT INSTITUTIONS	4,803	(1.4)	5,814	(1.2)	6,135	(1.4)
PROVINCIAL & MUNICIPAL	5,291	(1.5)	5,892	(1.3)	6,026	(1.3)
FOREIGN	5,092	(1.5)	6,131	(1.3)	6,895	(1.5)
OTHER CANADIAN	4,028	(1.2)	3,917	(0.9)	3,717	(0.8)
TOTAL	348,575	(100.0)	469,749	(100.0)	448,524	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RESEARCH AND DEVELOPMENT

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	50	---	50	50	---	50	50	---	50
AGR-ADM	---	---	---	---	---	---	---	---	---
AGR-DEV	50	---	50	50	---	50	50	---	50
AGR-RI	---	---	---	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---	---	---	---
CDC	---	---	---	---	---	---	---	---	---
CLFB	51	20	71	61	10	71	77	40	117
COMMUNICATIONS									
COMM	---	193	193	---	714	714	---	560	560
COMM-COMM	---	193	193	---	714	714	---	560	560
COMM-AC	---	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---	---
CRTC	534	68	602	519	160	679	569	250	819
NFB	---	---	---	---	---	---	---	---	---
NLIB	---	---	---	---	---	---	---	---	---
NMUS	1,640	169	1,809	3,410	176	3,586	4,893	205	5,098
PA	---	---	---	---	---	---	---	---	---
SSHRC	2,054	23,514	25,568	2,269	25,605	27,874	2,998	32,728	35,726
CONSUMER AND CORPORATE AFFAIRS									
CCA	2,020	642	2,662	2,601	1,022	3,623	3,543	1,094	4,637
CCA-ADM	---	---	---	2,045	987	3,032	2,761	1,094	3,855
CCA-CON	852	559	1,411	---	---	---	---	---	---
CCA-COR	705	83	788	---	---	---	---	---	---
CCA-CICP	463	---	463	556	35	591	782	---	782
ECONOMIC DEVELOPMENT									
ED	---	---	---	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION									
EI	1,465	63	1,528	1,428	49	1,477	1,518	50	1,568
EI-ADM	1,465	63	1,528	1,428	49	1,477	1,518	50	1,568
CEIC	---	---	---	---	---	---	---	---	---
ENERGY MINES & RESOURCES									
EMR	45	1,593	1,638	45	1,820	1,865	51	2,760	2,811
EMR-ENER	---	---	---	---	---	---	---	---	---
EMR-MES	45	1,593	1,638	45	1,820	1,865	51	2,760	2,811
AECB	---	---	---	---	---	---	---	---	---
AECL	---	---	---	---	---	---	---	---	---
NEB	---	---	---	---	---	---	---	---	---
ENVIRONMENT									
ENV	640	200	840	679	235	914	815	268	1,083
ENV-ADM	---	---	---	---	---	---	---	---	---
ENV-ES	640	83	723	679	106	785	815	123	938
ENV-EPS	---	---	---	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---	---	---	---
ENV-ECS	640	83	723	679	106	785	815	123	938
ENV-FOR	---	---	---	---	---	---	---	---	---
ENV-PC	---	117	117	---	129	129	---	145	145
EXTERNAL AFFAIRS									
EA	---	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---	---
CIDA	224	1,225	1,449	266	1,340	1,606	284	1,500	1,784
IDRC	4,247	9,756	14,003	4,965	9,828	14,793	6,126	12,276	18,402
IJC	---	---	---	---	---	---	---	---	---
FINANCE									
FIN	---	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---	---
FISHERIES AND OCEANS									
F&O	825	---	825	854	---	854	946	---	946
F&O-FM	825	---	825	854	---	854	946	---	946
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	630	547	1,177	700	461	1,161	571	777	1,348
IAND-IIA	---	---	---	2	---	2	13	---	13
IAND-NA	630	547	1,177	698	461	1,159	558	777	1,335
INDUSTRY TRADE AND COMMERCE									
ITC	138	851	989	151	2,171	2,322	155	2,171	2,326
ITC-TI	47	695	742	51	2,000	2,051	55	2,800	2,855
ITC-TOUR	91	156	247	100	171	271	100	171	271
ITC-GO	---	---	---	---	---	---	---	---	---

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RESEARCH AND DEVELOPMENT

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	677	1,273	1,950	1,013	2,009	3,022	1,825	3,027	4,852
JUST-ADM	677	1,273	1,950	1,013	2,009	3,022	1,825	3,027	4,852
JUST-CUIO	---	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---	---
LRC	246	667	913	387	1,080	1,467	511	1,239	1,750
LABOUR									
LAB	411	192	603	452	210	662	509	236	745
NATIONAL DEFENCE									
NDEF	713	---	713	797	---	797	898	---	898
NDEF-SER	713	---	713	797	---	797	898	---	898
NATIONAL HEALTH AND WELFARE									
NHW	2,147	5,840	7,987	2,633	6,113	8,746	2,998	6,271	9,269
NHW-ADM	1,527	150	1,677	1,996	165	2,161	2,337	185	2,522
NHW-HSS	620	5,690	6,310	637	5,948	6,585	661	6,086	6,747
NHW-MS	---	---	---	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---	---	---	---
NHW-IS	---	---	---	---	---	---	---	---	---
MRC	---	---	---	---	---	---	---	---	---
NATIONAL REVENUE									
NREV	827	---	827	828	---	828	796	---	796
NREV-TAX	827	---	827	828	---	828	796	---	796
PRIVY COUNCIL									
PC	---	549	549	---	589	589	---	89	89
COL	---	---	---	---	---	---	---	---	---
ECC	6,486	533	7,019	5,950	490	6,440	6,319	495	6,814
PUBLIC WORKS									
PW	---	---	---	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---	---	---	---
CMHC	1,620	1,138	2,758	1,650	1,650	3,300	1,780	1,675	3,455
NCC	---	10	10	---	16	16	---	10	10
REGIONAL ECONOMIC EXPANSION									
REE	820	52	872	1,011	60	1,071	1,198	60	1,258
SCIENCE AND TECHNOLOGY									
ST	---	---	---	---	---	---	---	---	---
NRC	---	---	---	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---	---	---	---
NSERC	---	---	---	---	---	---	---	---	---
SC	1,112	386	1,498	1,307	605	1,912	1,511	690	2,201
SECRETARY OF STATE									
SECS	2,378	3,467	5,845	2,950	3,042	5,992	2,608	3,807	6,415
SECS-OL	---	480	480	---	509	509	---	724	724
SECS-ES	---	---	---	---	---	---	---	---	---
SECS-TRA	2,378	490	2,868	2,950	250	3,200	2,608	500	3,108
SECS-CIT	---	2,497	2,497	---	2,283	2,283	---	2,583	2,583
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	775	1,640	2,415	938	2,075	3,013	938	2,075	3,013
SGEN-ADM	775	1,640	2,415	938	2,075	3,013	938	2,075	3,013
RCMP	---	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES									
SS	1	210	211	1	197	198	1	195	196
SS-SUPP	1	210	211	1	197	198	1	195	196
STCAN	5,828	---	5,828	8,108	---	8,108	9,324	---	9,324
TRANSPORT									
TPT	93	25	118	102	46	148	173	22	195
TPT-ADM	3	14	17	7	21	28	8	22	30
TPT-MAR	---	---	---	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---	---	---	---
TPT-SUR	90	11	101	95	25	120	165	---	165
CTC	1,139	300	1,439	1,092	370	1,462	1,362	370	1,732
TREASURY BOARD									
TB	---	113	113	---	113	113	---	128	128
TB-ADM	---	113	113	---	113	113	---	128	128
TOTAL	39,836	55,236	95,072	47,217	62,256	109,473	55,347	75,068	130,415

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT IN CANADIAN INDUSTRY BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
AGRICULTURE						
AGR	---	---	---	---	---	---
AGR-ADM	---	---	---	---	---	---
AGR-DEV	---	---	---	---	---	---
AGR-RI	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---
CDC	---	---	---	---	---	---
CLFB	---	---	---	---	---	20
COMMUNICATIONS						
COMM	193	---	714	---	560	---
COMM-COMM	193	---	714	---	560	---
COMM-AC	---	---	---	---	---	---
CBC	---	---	---	---	---	---
CRTC	---	---	---	---	---	50
NFB	---	---	---	---	---	---
NLIB	---	---	---	---	---	---
NMUS	---	---	---	---	---	---
PA	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---
CONSUMER AND CORPORATE AFFAIRS						
CCA	---	122	---	209	---	233
CCA-ADM	---	---	---	209	---	233
CCA-CON	---	99	---	---	---	---
CCA-COR	---	23	---	---	---	---
CCA-CICP	---	---	---	---	---	---
ECONOMIC DEVELOPMENT						
ED	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION						
EI	---	7	---	49	---	50
EI-ADM	---	7	---	49	---	50
CEIC	---	---	---	---	---	---
ENERGY MINES & RESOURCES						
EMR	---	---	---	---	---	---
EMR-ENER	---	---	---	---	---	---
EMR-MES	---	---	---	---	---	---
AECB	---	---	---	---	---	---
AECL	---	---	---	---	---	---
NEB	---	---	---	---	---	---
ENVIRONMENT						
ENV	---	39	---	54	---	62
ENV-ADM	---	---	---	---	---	---
ENV-ES	---	11	---	23	---	27
ENV-EPS	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---
ENV-ECS	---	11	---	23	---	27
ENV-FOR	---	---	---	---	---	---
ENV-PC	---	28	---	31	---	35
EXTERNAL AFFAIRS						
EA	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---
CIDA	---	---	---	---	---	---
IDRC	---	---	---	---	---	---
IJC	---	---	---	---	---	---
FINANCE						
FIN	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---
FISHERIES AND OCEANS						
F&O	---	---	---	---	---	---
F&O-FM	---	---	---	---	---	---
INDIAN AFFAIRS & NORTHERN DEVELOPMENT						
IAND	184	10	---	52	---	418
IAND-IIA	---	---	---	---	---	---
IAND-NA	184	10	---	52	---	418
INDUSTRY TRADE AND COMMERCE						
ITC	---	156	---	171	---	171
ITC-TI	---	---	---	---	---	---
ITC-TOUR	---	156	---	171	---	171
ITC-GO	---	---	---	---	---	---

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT

IN CANADIAN INDUSTRY

BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
JUSTICE						
JUST	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---
CHRC	---	---	---	---	---	---
LRC	---	---	---	---	---	---
LABOUR						
LAB	35	10	38	11	43	12
NATIONAL DEFENCE						
NDEF	---	---	---	---	---	---
NDEF-SER	---	---	---	---	---	---
NATIONAL HEALTH AND WELFARE						
NHW	48	51	75	---	75	15
NHW-ADM	---	---	---	---	---	---
NHW-HSS	48	51	75	---	75	15
NHW-MS	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---
NHW-IS	---	---	---	---	---	---
MRC	---	---	---	---	---	---
NATIONAL REVENUE						
NREV	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---
PRIVY COUNCIL						
PC	---	---	---	---	---	---
COL	---	---	---	---	---	---
ECC	---	296	---	300	---	300
PUBLIC WORKS						
PW	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---
CMHC	48	967	75	1,415	75	1,445
NCC	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION						
REE	---	52	---	60	---	60
SCIENCE AND TECHNOLOGY						
ST	---	---	---	---	---	---
NRC	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---
NSERC	---	---	---	---	---	---
SC	---	152	---	247	---	282
SECRETARY OF STATE						
SECS	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---
PSC	---	---	---	---	---	---
SOLICITOR GENERAL						
SGEN	---	635	---	833	---	850
SGEN-ADM	---	635	---	833	---	850
RCMP	---	---	---	---	---	---
SUPPLY AND SERVICES						
SS	---	95	---	82	---	82
SS-SUPP	---	95	---	82	---	82
STCAN	---	---	---	---	---	---
TRANSPORT						
TPT	---	---	---	---	---	---
TPT-ADM	---	---	---	---	---	---
TPT-MAR	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---
TPT-SUR	---	---	---	---	---	---
CTC	---	150	---	200	---	200
TREASURY BOARD						
TB	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---
TOTAL	508	2,742	902	3,683	753	4,250

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT IN CANADIAN UNIVERSITIES AND NON-PROFIT INSTITUTIONS BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
AGRICULTURE						
AGR	---	---	---	---	---	---
AGR-ADM	---	---	---	---	---	---
AGR-DEV	---	---	---	---	---	---
AGR-RI	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---
CDC	---	---	---	---	---	---
CLFB	---	3	---	---	---	---
COMMUNICATIONS						
COMM	---	---	---	---	---	---
COMM-COMM	---	---	---	---	---	---
COMM-AC	---	---	---	---	---	---
CBC	---	---	---	---	---	---
CRTC	34	---	75	---	100	25
NFB	---	---	---	---	---	---
NLIB	---	---	---	---	---	---
NMUS	---	---	---	---	---	---
PA	---	---	---	---	---	---
SSHRC	18,235	---	19,700	---	26,085	---
CONSUMER AND CORPORATE AFFAIRS						
CCA	---	85	---	258	---	291
CCA-ADM	---	---	---	258	---	291
CCA-CON	---	31	---	---	---	---
CCA-COR	---	54	---	---	---	---
CCA-CICP	---	---	---	---	---	---
ECONOMIC DEVELOPMENT						
ED	---	---	---	---	---	---
EMPLOYMENT & IMMIGRATION						
EI	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---
CEIC	---	---	---	---	---	---
ENERGY MINES & RESOURCES						
EMR	125	---	125	---	125	---
EMR-ENER	---	---	---	---	---	---
EMR-MES	125	---	125	---	125	---
AECB	---	---	---	---	---	---
AECL	---	---	---	---	---	---
NEB	---	---	---	---	---	---
ENVIRONMENT						
ENV	28	35	15	45	15	55
ENV-ADM	---	---	---	---	---	---
ENV-ES	28	35	15	45	15	55
ENV-EPS	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---
ENV-ECS	28	35	15	45	15	55
ENV-FOR	---	---	---	---	---	---
ENV-PC	---	---	---	---	---	---
EXTERNAL AFFAIRS						
EA	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---
CIDA	---	---	---	---	---	---
IDRC	323	---	449	---	914	---
IJC	---	---	---	---	---	---
FINANCE						
FIN	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---
FISHERIES AND OCEANS						
F&O	---	---	---	---	---	---
F&O-FM	---	---	---	---	---	---
INDIAN AFFAIRS & NORTHERN DEVELOPMENT						
IAND	100	17	277	5	309	---
IAND-IIA	---	---	---	---	---	---
IAND-NA	100	17	277	5	309	---
INDUSTRY TRADE AND COMMERCE						
ITC	695	---	2,000	---	2,000	---
ITC-TI	695	---	2,000	---	2,000	---
ITC-TOUR	---	---	---	---	---	---
ITC-GO	---	---	---	---	---	---

FEDERAL SUPPORT OF RESEARCH AND DEVELOPMENT

IN CANADIAN UNIVERSITIES AND NON-PROFIT INSTITUTIONS

BY DEPARTMENT OR AGENCY, 1980-1983

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81		1981-82		1982-83	
	GRANTS	CONTRACTS	GRANTS	CONTRACTS	GRANTS	CONTRACTS
JUSTICE						
JUST	611	---	700	---	420	---
JUST-ADM	611	---	700	---	420	---
JUST-CUIO	---	---	---	---	---	---
CHRC	---	---	---	---	---	---
LRC	---	---	---	7	---	8
LABOUR						
LAB	75	65	82	71	92	80
NATIONAL DEFENCE						
NDEF	---	---	---	---	---	---
NDEF-SER	---	---	---	---	---	---
NATIONAL HEALTH AND WELFARE						
NHW	4,997	34	5,448	34	5,502	106
NHW-ADM	150	---	165	---	185	---
NHW-HSS	4,847	34	5,283	34	5,317	106
NHW-MS	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---
NHW-IS	---	---	---	---	---	---
MRC	---	---	---	---	---	---
NATIONAL REVENUE						
NREV	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---
PRIVY COUNCIL						
PC	549	---	589	---	89	---
COL	---	---	---	---	---	---
ECC	---	207	---	165	---	180
PUBLIC WORKS						
PW	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---
CMHC	10	54	15	60	20	50
NCC	---	---	---	---	---	---
REGIONAL ECONOMIC EXPANSION						
REE	---	---	---	---	---	---
SCIENCE AND TECHNOLOGY						
ST	---	---	---	---	---	---
NRC	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---
NSERC	---	---	---	---	---	---
SC	---	48	---	84	---	94
SECRETARY OF STATE						
SECS	2,409	490	2,224	250	2,739	500
SECS-OL	480	---	509	---	724	---
SECS-ES	---	---	---	---	---	---
SECS-TRA	---	490	---	250	---	500
SECS-CIT	1,929	---	1,715	---	2,015	---
PSC	---	---	---	---	---	---
SOLICITOR GENERAL						
SGEN	340	565	375	729	375	712
SGEN-ADM	340	565	375	729	375	712
RCMP	---	---	---	---	---	---
SUPPLY AND SERVICES						
SS	---	114	---	88	---	88
SS-SUPP	---	114	---	88	---	88
STCAN	---	---	---	---	---	---
TRANSPORT						
TPT	---	14	---	21	---	22
TPT-ADM	---	14	---	21	---	22
TPT-MAR	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---
TPT-SUR	---	---	---	---	---	---
CTC	---	125	---	145	---	145
TREASURY BOARD						
TB	113	---	113	---	128	---
TB-ADM	113	---	113	---	128	---
TOTAL	28,644	1,856	32,187	1,962	38,913	2,356

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
AGRICULTURE									
AGR	1,200	---	1,200	1,650	38	1,688	1,675	63	1,738
AGR-ADM	---	---	---	---	---	---	---	---	---
AGR-DEV	1,200	---	1,200	1,650	38	1,688	1,675	63	1,738
AGR-RI	---	---	---	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---	---	---	---
CDC	---	---	---	---	---	---	---	---	---
CLFB	18	---	18	21	---	21	23	5	28
COMMUNICATIONS									
COMM	4,152	1,063	5,215	4,221	1,209	5,430	4,326	1,225	5,551
COMM-COMM	3,767	791	4,558	3,672	775	4,447	3,876	860	4,736
COMM-AC	385	272	657	549	434	983	450	365	815
CBC	1,738	1,898	3,636	1,867	2,175	4,042	2,123	2,484	4,607
CRTC	---	---	---	---	---	---	---	---	---
NFB	---	---	---	---	---	---	---	---	---
NLIB	17,225	20	17,245	21,536	73	21,609	25,796	46	25,842
NMUS	27,564	5,831	33,395	28,149	5,908	34,057	28,337	6,051	34,388
PA	10,817	---	10,817	11,960	---	11,960	13,689	---	13,689
SSHRC	1,948	14,862	16,810	2,182	16,545	18,727	2,330	18,620	20,950
CONSUMER AND CORPORATE AFFAIRS									
CCA	56	161	217	58	465	523	177	630	807
CCA-ADM	---	---	---	---	---	---	---	---	---
CCA-CON	---	---	---	---	---	---	---	---	---
CCA-COR	---	---	---	---	---	---	---	---	---
CCA-CICP	56	161	217	58	465	523	177	630	807
ECONOMIC DEVELOPMENT									
ED	1,527	150	1,677	1,888	150	2,038	2,343	150	2,493
EMPLOYMENT & IMMIGRATION									
EI	7,173	828	8,001	7,305	820	8,125	7,754	858	8,612
EI-ADM	7,173	828	8,001	7,305	820	8,125	7,754	858	8,612
CEIC	4,573	3,185	7,758	8,436	819	9,255	7,326	800	8,126
ENERGY MINES & RESOURCES									
EMR	6,174	610	6,784	7,912	680	8,592	8,054	780	8,834
EMR-ENER	1,490	610	2,100	1,670	680	2,350	1,910	780	2,690
EMR-MES	4,684	---	4,684	6,242	---	6,242	6,144	---	6,144
AECB	---	---	---	---	---	---	---	---	---
AECL	---	---	---	---	---	---	---	---	---
NEB	1,295	12	1,307	1,648	33	1,681	1,689	---	1,689
ENVIRONMENT									
ENV	14,252	407	14,659	15,653	433	16,086	17,820	516	18,336
ENV-ADM	261	---	261	308	---	308	438	---	438
ENV-ES	3,127	342	3,469	3,395	362	3,757	4,095	438	4,533
ENV-EPS	---	---	---	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---	---	---	---
ENV-ECS	3,127	342	3,469	3,395	362	3,757	4,095	438	4,533
ENV-FOR	---	---	---	---	---	---	---	---	---
ENV-PC	10,864	65	10,929	11,950	71	12,021	13,287	78	13,365
EXTERNAL AFFAIRS									
EA	4,317	1,612	5,929	4,888	1,762	6,650	5,282	1,938	7,220
EA-CIA	4,317	1,612	5,929	4,888	1,762	6,650	5,282	1,938	7,220
CIDA	1,414	1,394	2,808	1,497	1,533	3,030	1,809	1,687	3,496
IDRC	4,514	1,171	5,685	5,256	1,551	6,807	6,414	1,914	8,328
IJC	---	---	---	---	---	---	---	---	---
FINANCE									
FIN	8,514	---	8,514	10,077	---	10,077	12,613	---	12,613
FIN-FEP	8,514	---	8,514	10,077	---	10,077	12,613	---	12,613
FISHERIES AND OCEANS									
F&O	2,375	300	2,675	2,276	300	2,576	2,524	322	2,846
F&O-FM	2,375	300	2,675	2,276	300	2,576	2,524	322	2,846
INDIAN AFFAIRS & NORTHERN DEVELOPMENT									
IAND	689	71	760	983	910	1,893	1,032	845	1,877
IAND-IIA	---	---	---	78	300	378	82	300	382
IAND-NA	689	71	760	905	610	1,515	950	545	1,495
INDUSTRY TRADE AND COMMERCE									
ITC	98	475	573	108	505	613	108	305	413
ITC-TI	---	475	475	---	505	505	---	305	305
ITC-TOUR	98	---	98	108	---	108	108	---	108
ITC-GO	---	---	---	---	---	---	---	---	---

FEDERAL INTRAMURAL AND EXTRAMURAL EXPENDITURES ON RELATED SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL	INTRA-MURAL	EXTRA-MURAL	TOTAL
JUSTICE									
JUST	1,820	511	2,331	2,438	552	2,990	2,486	776	3,262
JUST-ADM	268	511	779	338	552	890	386	776	1,162
JUST-CUIO	1,552	---	1,552	2,100	---	2,100	2,100	---	2,100
CHRC	304	---	304	288	---	288	325	---	325
LRC	296	257	553	302	580	882	359	829	1,188
LABOUR									
LAB	3,035	175	3,210	3,338	191	3,529	3,763	216	3,979
NATIONAL DEFENCE									
NDEF	1,199	125	1,324	1,373	163	1,536	1,519	158	1,677
NDEF-SER	1,199	125	1,324	1,373	163	1,536	1,519	158	1,677
NATIONAL HEALTH AND WELFARE									
NHW	3,753	3,325	7,078	5,140	4,799	9,939	6,008	5,450	11,458
NHW-ADM	2,727	1,570	4,297	3,830	2,070	5,900	4,407	2,070	6,477
NHW-HSS	495	1,755	2,250	698	2,729	3,427	684	3,380	4,064
NHW-MS	---	---	---	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---	---	---	---
NHW-IS	531	---	531	612	---	612	917	---	917
MRC	---	---	---	---	---	---	---	---	---
NATIONAL REVENUE									
NREV	3,659	---	3,659	9,890	---	9,890	6,190	---	6,190
NREV-TAX	3,659	---	3,659	9,890	---	9,890	6,190	---	6,190
PRIVY COUNCIL									
PC	---	---	---	---	---	---	---	---	---
COL	975	---	975	1,172	---	1,172	3,097	---	3,097
ECC	1,011	---	1,011	952	---	952	1,000	---	1,000
PUBLIC WORKS									
PW	---	---	---	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---	---	---	---
CMHC	4,611	2,085	6,696	4,645	3,086	7,731	5,055	3,161	8,216
NCC	43	39	82	131	190	321	69	130	199
REGIONAL ECONOMIC EXPANSION									
REE	---	840	840	---	1,259	1,259	---	1,439	1,439
SCIENCE AND TECHNOLOGY									
ST	6,472	532	7,004	7,549	486	8,035	8,382	535	8,917
NRC	---	---	---	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---	---	---	---
NSERC	---	---	---	---	---	---	---	---	---
SC	1,392	---	1,392	1,630	---	1,630	1,846	---	1,846
SECRETARY OF STATE									
SECS	2,364	864	3,228	2,774	1,251	4,025	2,845	1,681	4,526
SECS-OL	71	302	373	91	216	307	91	216	307
SECS-ES	139	---	139	415	---	415	465	430	895
SECS-TRA	2,081	172	2,253	2,191	290	2,481	1,937	290	2,227
SECS-CIT	73	390	463	77	745	822	352	745	1,097
PSC	---	---	---	---	---	---	---	---	---
SOLICITOR GENERAL									
SGEN	750	1,010	1,760	872	1,784	2,656	872	1,284	2,156
SGEN-ADM	750	1,010	1,760	872	1,784	2,656	872	1,284	2,156
RCMP	---	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES									
SS	3	348	351	3	355	358	3	355	358
SS-SUPP	3	348	351	3	355	358	3	355	358
STCAN	138,216	90	138,306	221,736	121	221,857	177,786	109	177,895
TRANSPORT									
TPT	390	526	916	564	588	1,152	967	507	1,474
TPT-ADM	390	526	916	564	588	1,152	967	507	1,474
TPT-MAR	---	---	---	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---	---	---	---
TPT-SUR	---	---	---	---	---	---	---	---	---
CTC	1,191	128	1,319	1,145	108	1,253	1,415	108	1,523
TREASURY BOARD									
TB	10,553	---	10,553	12,814	---	12,814	15,316	---	15,316
TB-ADM	10,553	---	10,553	12,814	---	12,814	15,316	---	15,316
TOTAL	303,670	44,905	348,575	418,327	51,422	469,749	392,547	55,977	448,524

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1980-81

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	---	25	---	2	---	---	---	27
AGR-ADM	---	---	---	---	---	---	---	---
AGR-DEV	---	25	---	2	---	---	---	27
AGR-RI	---	---	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---	---	---
CDC	---	---	---	---	---	---	---	---
CLFB	0	1	---	---	1	---	---	2
COMMUNICATIONS								
COMM	8	39	33	3	28	---	---	111
COMM-COMM	8	32	32	3	26	---	---	101
COMM-AC	---	7	1	---	2	---	---	10
CBC	4	19	1	31	2	---	---	57
CRTC	---	2	5	4	6	---	---	17
NFB	---	---	---	---	---	---	---	---
NLIB	2	192	38	49	220	2	---	500
NMUS	5	73	137	188	116	160	---	679
PA	---	113	3	68	82	---	---	266
SSHRC	4	2	50	---	49	---	---	105
CONSUMER AND CORPORATE AFFAIRS								
CCA	2	28	6	4	14	---	---	54
CCA-ADM	---	---	---	---	---	---	---	---
CCA-CON	---	14	2	2	4	---	---	22
CCA-COR	1	5	4	2	6	---	---	18
CCA-CICP	1	9	---	---	4	---	---	14
ECONOMIC DEVELOPMENT								
ED	12	9	5	---	7	---	---	33
EMPLOYMENT & IMMIGRATION								
EI	6	80	8	26	61	---	---	181
EI-ADM	6	80	8	26	61	---	---	181
CEIC	---	86	9	11	58	---	---	164
ENERGY MINES & RESOURCES								
EMR	6	100	6	15	39	1	---	166
EMR-ENER	2	35	---	---	---	---	---	36
EMR-MES	4	65	6	15	39	1	---	130
AECB	---	---	---	---	---	---	---	---
AECL	---	---	---	---	---	---	---	---
NEB	1	24	---	5	9	---	---	39
ENVIRONMENT								
ENV	1	95	14	82	48	3	---	243
ENV-ADM	---	2	---	---	4	---	---	6
ENV-ES	1	39	7	8	12	1	---	68
ENV-EPS	---	---	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---	---	---
ENV-ECS	1	39	7	8	12	1	---	68
ENV-FOR	---	---	---	---	---	---	---	---
ENV-PC	---	54	7	74	32	2	---	169
EXTERNAL AFFAIRS								
EA	---	7	64	---	28	---	---	99
EA-CIA	---	7	64	---	28	---	---	99
CIDA	1	8	19	3	10	---	---	41
IDRC	5	39	8	46	55	---	---	153
IJC	---	---	---	---	---	---	---	---
FINANCE								
FIN	9	118	19	24	38	---	---	208
FIN-FEP	9	118	19	24	38	---	---	208
FISHERIES AND OCEANS								
F&O	---	46	13	11	30	---	---	100
F&O-FM	---	46	13	11	30	---	---	100
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	1	16	5	3	5	3	---	33
IAND-IIA	---	---	---	---	---	---	---	---
IAND-NA	1	16	5	3	5	3	---	33
INDUSTRY TRADE AND COMMERCE								
ITC	---	1	3	---	0	1	---	5
ITC-TI	---	1	---	---	0	---	---	1
ITC-TOUR	---	---	3	---	---	1	---	4
ITC-GO	---	---	---	---	---	---	---	---

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1980-81

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
JUSTICE								
JUST	4	9	9	1	15	---	---	38
JUST-ADM	3	9	3	1	10	---	---	26
JUST-CUIO	1	---	6	---	5	---	---	12
CHRC	---	2	2	---	1	---	---	5
LRC	1	---	4	---	31	---	---	36
LABOUR								
LAB	3	24	30	20	36	---	---	112
NATIONAL DEFENCE								
NDEF	---	18	5	---	13	0	32	68
NDEF-SER	---	18	5	---	13	0	32	68
NATIONAL HEALTH AND WELFARE								
NHW	6	70	15	31	38	---	---	159
NHW-ADM	4	50	5	27	22	---	---	108
NHW-HSS	2	14	5	---	13	---	---	34
NHW-MS	---	---	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---	---	---
NHW-IS	0	6	5	4	3	---	---	17
MRC	---	---	---	---	---	---	---	---
NATIONAL REVENUE								
NREV	2	31	66	4	89	---	---	192
NREV-TAX	2	31	66	4	89	---	---	192
PRIVY COUNCIL								
PC	---	---	---	---	---	---	---	---
COL	1	---	25	---	4	---	---	30
ECC	3	66	20	11	57	---	---	157
PUBLIC WORKS								
PW	---	---	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---	---	---
CMHC	8	60	2	34	21	---	---	125
NCC	---	4	1	---	---	---	---	5
REGIONAL ECONOMIC EXPANSION								
REE	2	9	3	3	8	---	---	24
SCIENCE AND TECHNOLOGY								
ST	22	11	71	5	50	2	---	161
NRC	---	---	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---	---	---
NSERC	---	---	---	---	---	---	---	---
SC	3	17	18	5	21	---	---	64
SECRETARY OF STATE								
SECS	---	3	134	2	53	---	---	192
SECS-OL	---	1	---	---	---	---	---	1
SECS-ES	---	2	2	---	---	---	---	4
SECS-TRA	---	---	131	---	53	---	---	184
SECS-CIT	---	---	1	2	---	---	---	3
PSC	---	---	---	---	---	---	---	---
SOLICITOR GENERAL								
SGEN	---	26	2	---	10	1	---	39
SGEN-ADM	---	26	2	---	10	1	---	39
RCMP	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES								
SS	- -	- -	---	---	---	---	---	0
SS-SUPP	- -	- -	---	---	---	---	---	0
STCAN	29	739	769	720	2,303	59	---	4,619
TRANSPORT								
TPT	---	7	---	---	---	---	---	7
TPT-ADM	---	5	---	---	---	---	---	5
TPT-MAR	---	---	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---	---	---
TPT-SUR	---	2	---	---	---	---	---	2
CTC	2	41	1	9	15	---	---	68
TREASURY BOARD								
TB	21	11	137	2	48	---	---	219
TB-ADM	21	11	137	2	48	---	---	219
TOTAL	173	2,271	1,758	1,418	3,718	232	32	9,602

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1981-82

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	---	28	---	2	---	---	---	30
AGR-ADM	---	---	---	---	---	---	---	---
AGR-DEV	---	28	---	2	---	---	---	30
AGR-RI	---	---	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---	---	---
CDC	---	---	---	---	---	---	---	---
CLFB	0	1	---	---	1	---	---	2
COMMUNICATIONS								
COMM	8	39	33	3	28	---	---	111
COMM-COMM	8	32	32	3	26	---	---	101
COMM-AC	---	7	1	---	2	---	---	10
CBC	4	19	1	30	2	---	---	56
CRTC	---	2	5	4	5	---	---	16
NFB	---	---	---	---	---	---	---	---
NLIB	2	199	41	39	234	2	---	517
NMUS	6	74	130	177	126	142	---	655
PA	---	117	3	76	81	2	---	279
SSHRC	4	2	50	---	49	---	---	105
CONSUMER AND CORPORATE AFFAIRS								
CCA	3	25	6	5	16	---	---	55
CCA-ADM	2	16	6	5	12	---	---	41
CCA-CON	---	---	---	---	---	---	---	---
CCA-COR	---	---	---	---	---	---	---	---
CCA-CICP	1	9	---	---	4	---	---	14
ECONOMIC DEVELOPMENT								
ED	14	13	4	---	8	---	---	39
EMPLOYMENT & IMMIGRATION								
EI	6	85	8	21	50	---	---	170
EI-ADM	6	85	8	21	50	---	---	170
CEIC	1	94	8	9	45	---	---	157
ENERGY MINES & RESOURCES								
EMR	8	108	6	15	39	1	---	176
EMR-ENER	2	44	---	---	---	---	---	45
EMR-MES	6	64	6	15	39	1	---	131
AECB	---	---	---	---	---	---	---	---
AECL	---	---	---	---	---	---	---	---
NEB	1	22	---	5	9	---	---	37
ENVIRONMENT								
ENV	1	95	14	82	48	3	---	243
ENV-ADM	---	2	---	---	4	---	---	6
ENV-ES	1	39	7	8	12	1	---	68
ENV-EPS	---	---	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---	---	---
ENV-ECS	1	39	7	8	12	1	---	68
ENV-FOR	---	---	---	---	---	---	---	---
ENV-PC	---	54	7	74	32	2	---	169
EXTERNAL AFFAIRS								
EA	---	7	64	---	28	---	---	99
EA-CIA	---	7	64	---	28	---	---	99
CIDA	1	4	23	3	10	---	---	41
IDRC	5	45	6	52	59	---	---	166
IJC	---	---	---	---	---	---	---	---
FINANCE								
FIN	11	145	21	24	35	---	---	236
FIN-FEP	11	145	21	24	35	---	---	236
FISHERIES AND OCEANS								
F&O	---	45	12	11	30	---	---	98
F&O-FM	---	45	12	11	30	---	---	98
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	---	22	5	4	5	3	---	39
IAND-IIA	---	3	---	---	---	---	---	3
IAND-NA	---	19	5	4	5	3	---	36
INDUSTRY TRADE AND COMMERCE								
ITC	---	1	3	---	0	1	---	5
ITC-TI	---	1	---	---	0	---	---	1
ITC-TOUR	---	---	3	---	---	1	---	4
ITC-GO	---	---	---	---	---	---	---	---

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1981-82

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
JUSTICE								
JUST	4	10	8	1	18	---	---	41
JUST-ADM	3	10	2	1	12	---	---	28
JUST-CUIO	1	---	6	---	6	---	---	13
CHRC	---	3	2	---	1	---	---	6
LRC	3	1	5	---	32	---	---	41
LABOUR								
LAB	3	24	31	20	37	---	---	116
NATIONAL DEFENCE								
NDEF	---	18	5	---	13	0	31	67
NDEF-SER	---	18	5	---	13	0	31	67
NATIONAL HEALTH AND WELFARE								
NHW	9	76	15	34	39	---	---	173
NHW-ADM	7	53	6	32	23	---	---	121
NHW-HSS	2	15	5	---	14	---	---	36
NHW-MS	---	---	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---	---	---
NHW-IS	0	8	4	2	2	---	---	16
MRC	---	---	---	---	---	---	---	---
NATIONAL REVENUE								
NREV	1	36	71	2	432	---	---	542
NREV-TAX	1	36	71	2	432	---	---	542
PRIVY COUNCIL								
PC	---	---	---	---	---	---	---	---
COL	1	---	31	---	7	---	---	39
ECC	3	63	25	17	35	---	---	143
PUBLIC WORKS								
PW	---	---	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---	---	---
CMHC	8	57	2	33	21	---	---	121
NCC	---	3	1	---	---	---	---	4
REGIONAL ECONOMIC EXPANSION								
REE	2	8	3	3	7	---	---	22
SCIENCE AND TECHNOLOGY								
ST	23	11	67	5	53	2	---	161
NRC	---	---	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---	---	---
NSERC	---	---	---	---	---	---	---	---
SC	5	16	18	5	21	---	---	65
SECRETARY OF STATE								
SECS	---	3	129	2	49	---	---	183
SECS-OL	---	1	---	---	---	---	---	1
SECS-ES	---	2	8	---	---	---	---	10
SECS-TRA	---	---	120	---	49	---	---	169
SECS-CIT	---	---	1	2	---	---	---	3
PSC	---	---	---	---	---	---	---	---
SOLICITOR GENERAL								
SGEN	---	26	2	---	10	1	---	39
SGEN-ADM	---	26	2	---	10	1	---	39
RCMP	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES								
SS	---	---	---	---	0	---	---	0
SS-SUPP	---	---	---	---	0	---	---	0
STCAN	31	767	832	766	3,011	82	---	5,489
TRANSPORT								
TPT	---	8	---	---	---	---	---	8
TPT-ADM	---	6	---	---	---	---	---	6
TPT-MAR	---	---	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---	---	---
TPT-SUR	---	2	---	---	---	---	---	2
CTC	2	42	1	11	12	---	---	68
TREASURY BOARD								
TB	25	17	146	2	42	---	---	232
TB-ADM	25	17	146	2	42	---	---	232
TOTAL	194	2,382	1,836	1,463	4,746	239	31	10,892

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1982-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
AGRICULTURE								
AGR	---	33	---	4	---	---	---	37
AGR-ADM	---	---	---	---	---	---	---	---
AGR-DEV	---	33	---	4	---	---	---	37
AGR-RI	---	---	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---	---	---
CDC	---	---	---	---	---	---	---	---
CLFB	8	1	---	---	1	---	---	2
COMMUNICATIONS								
COMM	8	39	33	3	26	---	---	109
COMM-COMM	8	32	32	3	25	---	---	100
COMM-AC	---	7	1	---	1	---	---	9
CBC	4	19	1	30	2	---	---	56
CRTC	---	1	4	5	5	---	---	15
NFB	---	---	---	---	---	---	---	---
NLIB	2	206	52	40	225	1	---	526
NMUS	7	73	133	173	149	132	---	667
PA	1	113	3	79	85	---	---	281
SSHRC	4	2	50	---	49	---	---	105
CONSUMER AND CORPORATE AFFAIRS								
CCA	3	28	5	4	16	---	---	56
CCA-ADM	2	19	5	4	12	---	---	42
CCA-CON	---	---	---	---	---	---	---	---
CCA-COR	---	---	---	---	---	---	---	---
CCA-CICP	1	9	---	---	4	---	---	14
ECONOMIC DEVELOPMENT								
ED	15	14	5	---	9	---	---	43
EMPLOYMENT & IMMIGRATION								
EI	6	85	8	21	50	---	---	170
EI-ADM	6	85	8	21	50	---	---	170
CEIC	1	94	8	9	45	---	---	157
ENERGY MINES & RESOURCES								
EMR	8	112	6	16	39	1	---	181
EMR-ENER	2	47	---	---	---	---	---	48
EMR-MES	6	65	6	16	39	1	---	133
AECB	---	---	---	---	---	---	---	---
AECL	---	---	---	---	---	---	---	---
NEB	1	23	---	5	9	---	---	38
ENVIRONMENT								
ENV	1	95	14	82	48	3	---	243
ENV-ADM	---	2	---	---	4	---	---	6
ENV-ES	1	39	7	8	12	1	---	68
ENV-EPS	---	---	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---	---	---
ENV-ECS	1	39	7	8	12	1	---	68
ENV-FOR	---	---	---	---	---	---	---	---
ENV-PC	---	54	7	74	32	2	---	169
EXTERNAL AFFAIRS								
EA	---	7	66	---	28	---	---	101
EA-CIA	---	7	66	---	28	---	---	101
CIDA	1	2	25	3	10	---	---	41
IDRC	5	57	6	51	65	---	---	182
IJC	---	---	---	---	---	---	---	---
FINANCE								
FIN	12	141	21	25	44	---	---	243
FIN-FEP	12	141	21	25	44	---	---	243
FISHERIES AND OCEANS								
F&O	---	45	12	11	30	---	---	98
F&O-FM	---	45	12	11	30	---	---	98
INDIAN AFFAIRS & NORTHERN DEVELOPMENT								
IAND	---	24	7	4	4	---	---	39
IAND-IIA	---	3	---	---	---	---	---	3
IAND-NA	---	21	7	4	4	---	---	35
INDUSTRY TRADE AND COMMERCE								
ITC	---	1	3	---	0	1	---	5
ITC-TI	---	1	---	---	0	---	---	1
ITC-TOUR	---	---	3	---	---	1	---	4
ITC-GO	---	---	---	---	---	---	---	---

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CATEGORY, 1982-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

DEPARTMENT OR AGENCY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMIN. & FOREIGN SERVICE	TECHNICAL	ADMINISTRATIVE SUPPORT	OPERATIONAL	MILITARY	TOTAL
JUSTICE								
JUST	5	18	8	1	23	---	---	55
JUST-ADM	4	18	2	1	17	---	---	42
JUST-CUIO	1	---	6	---	6	---	---	13
CHRC	---	2	2	---	1	---	---	5
LRC	3	1	5	---	36	---	---	45
LABOUR								
LAB	3	27	35	23	42	---	---	130
NATIONAL DEFENCE								
NDEF	---	18	5	---	13	0	31	67
NDEF-SER	---	18	5	---	13	0	31	67
NATIONAL HEALTH AND WELFARE								
NHW	10	88	15	34	45	---	---	191
NHW-ADM	7	60	6	32	23	---	---	128
NHW-HSS	2	16	5	---	20	---	---	43
NHW-MS	---	---	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---	---	---
NHW-IS	0	12	4	2	2	---	---	20
MRC	---	---	---	---	---	---	---	---
NATIONAL REVENUE								
NREV	2	44	69	2	122	---	---	239
NREV-TAX	2	44	69	2	122	---	---	239
PRIVY COUNCIL								
PC	---	---	---	---	---	---	---	---
COL	2	---	50	---	11	---	---	63
ECC	3	60	25	17	35	---	---	140
PUBLIC WORKS								
PW	---	---	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---	---	---
CMHC	8	57	2	33	21	---	---	121
NCC	---	3	---	---	---	---	---	3
REGIONAL ECONOMIC EXPANSION								
REE	2	12	5	3	8	---	---	29
SCIENCE AND TECHNOLOGY								
ST	22	11	69	5	53	1	---	161
NRC	---	---	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---	---	---
NSERC	---	---	---	---	---	---	---	---
SC	5	16	20	5	19	---	---	65
SECRETARY OF STATE								
SECS	---	4	130	5	49	---	---	188
SECS-OL	---	2	---	---	---	---	---	2
SECS-ES	---	2	8	---	---	---	---	10
SECS-TRA	---	---	120	---	49	---	---	169
SECS-CIT	---	---	2	5	---	---	---	7
PSC	---	---	---	---	---	---	---	---
SOLICITOR GENERAL								
SGEN	---	35	3	---	10	3	---	51
SGEN-ADM	---	35	3	---	10	3	---	51
RCMP	---	---	---	---	---	---	---	---
SUPPLY AND SERVICES								
SS	---	---	---	---	0	---	---	0
SS-SUPP	---	---	---	---	0	---	---	0
STCAN	49	786	751	811	2,142	37	---	4,576
TRANSPORT								
TPT	---	8	---	---	---	---	---	8
TPT-ADM	---	6	---	---	---	---	---	6
TPT-MAR	---	---	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---	---	---
TPT-SUR	---	2	---	---	---	---	---	2
CTC	2	42	1	11	12	---	---	68
TREASURY BOARD								
TB	29	10	145	2	44	---	---	230
TB-ADM	29	10	145	2	44	---	---	230
TOTAL	223	2,465	1,800	1,517	3,623	179	31	9,838

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	22	339	142	95	197	1	20	815
INTRAMURAL RSA	137	1,841	1,528	1,313	3,390	228	12	8,458
ADMIN. OF EXTRAMURAL PROGRAMS	13	91	88	11	123	3	0	329
TOTAL	173	2,271	1,758	1,419	3,710	232	32	9,602
1981-82								
INTRAMURAL R&D	24	348	147	102	182	1	20	815
INTRAMURAL RSA	157	1,948	1,681	1,358	4,429	235	11	9,723
ADMIN. OF EXTRAMURAL PROGRAMS	13	103	89	11	136	3	0	354
TOTAL	194	2,382	1,836	1,463	4,748	239	31	10,892
1982-83								
INTRAMURAL R&D	24	353	144	184	180	1	20	826
INTRAMURAL RSA	186	1,993	1,563	1,488	3,291	178	11	8,622
ADMIN. OF EXTRAMURAL PROGRAMS	13	119	93	13	152	0	0	389
TOTAL	223	2,465	1,800	1,517	3,623	179	31	9,838

4

Distribution by Cabinet Committee

TABLE 59

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY COMMITTEE, BY SCIENCE ACTIVITY

($ THOUSANDS)

	NATURAL SCIENCES				HUMAN SCIENCES				NATURAL AND HUMAN SCIENCES					
	R&D		RSA		R&D		RSA		R&D		RSA		TOTAL	S&T
	$	%	$	%	$	%	$	%	$	%	$	%	$	%
1980-81 TOTAL	1,240,020	100.0	437,587	100.0	95,072	100.0	348,575	100.0	1,335,092	100.0	786,162	100.0	2,121,254	100.0
ECONOMIC DEVELOPMENT	961,774	77.6	214,346	49.0	11,169	11.7	34,041	9.8	972,943	72.9	248,387	31.6	1,221,330	57.6
SOCIAL DEVELOPMENT	146,444	11.8	191,367	43.7	53,392	56.2	135,688	38.9	199,836	15.0	327,055	41.6	526,891	24.8
EXTERNAL AFF. & DEF.	127,542	10.3	27,664	6.3	16,165	17.0	15,746	4.5	143,707	10.8	43,410	5.5	187,117	8.8
SERVICE TO GOVERNMENT	4,260	0.3	4,210	1.0	14,346	15.1	163,100	46.8	18,606	1.4	167,310	21.3	185,916	8.8
1981-82 TOTAL	1,533,864	100.0	491,437	100.0	109,473	100.0	469,749	100.0	1,643,337	100.0	961,186	100.0	2,604,523	100.0
ECONOMIC DEVELOPMENT	1,215,701	79.3	241,168	49.1	14,952	13.7	39,395	8.4	1,230,653	74.9	280,563	29.2	1,511,216	58.0
SOCIAL DEVELOPMENT	175,175	11.4	212,708	43.3	61,231	55.9	155,248	33.0	236,406	14.4	367,956	38.3	604,362	23.2
EXTERNAL AFF. & DEF.	141,580	9.2	31,062	6.3	17,196	15.7	18,023	3.8	158,776	9.7	49,085	5.1	207,861	8.0
SERVICE TO GOVERNMENT	1,408	0.1	6,499	1.3	16,094	14.7	257,083	54.7	17,502	1.1	263,582	27.4	281,084	10.8
1982-83 TOTAL	1,784,287	100.0	578,213	100.0	130,415	100.0	448,524	100.0	1,914,702	100.0	1,026,737	100.0	2,941,439	100.0
ECONOMIC DEVELOPMENT	1,410,454	79.0	283,328	49.0	17,774	13.6	43,120	9.6	1,428,228	74.6	326,448	31.8	1,754,676	59.7
SOCIAL DEVELOPMENT	196,184	11.0	254,398	44.0	74,396	57.0	168,373	37.5	270,580	14.1	422,771	41.2	693,351	23.6
EXTERNAL AFF. & DEF.	175,269	9.8	34,304	5.9	21,084	16.2	20,721	4.6	196,353	10.3	55,025	5.4	251,378	8.5
SERVICE TO GOVERNMENT	2,380	0.1	6,183	1.1	17,161	13.2	216,310	48.2	19,541	1.0	222,493	21.7	242,034	8.2

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CABINET COMMITTEE

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	NATURAL	HUMAN	TOTAL	NATURAL	HUMAN	TOTAL	NATURAL	HUMAN	TOTAL
ECONOMIC DEVELOPMENT CABINET COMMITTEE									
AGR	151,119	1,250	152,369	166,784	1,738	168,522	194,281	1,788	196,069
AGR-ADM	4,200	---	4,200	4,783	---	4,783	5,084	---	5,084
AGR-DEV	139,446	1,250	140,696	153,383	1,738	155,121	177,026	1,788	178,814
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	2,883	---	2,883	3,515	---	3,515	4,190	---	4,190
CDC	598	---	598	2,200	---	2,200	2,500	---	2,500
CLFB	---	89	89	---	92	92	---	145	145
COMM-COMM	60,571	4,751	65,322	76,139	5,161	81,300	61,430	5,296	66,726
CCA	14,545	2,879	17,424	14,972	4,146	19,118	17,731	5,444	23,175
CCA-ADM	---	---	---	---	3,032	3,032	---	3,855	3,855
CCA-CON	2,170	1,411	3,581	2,435	---	2,435	2,850	---	2,850
CCA-COR	12,375	788	13,163	12,537	---	12,537	14,881	---	14,881
CCA-CICP	---	680	680	---	1,114	1,114	---	1,589	1,589
ED	---	1,677	1,677	---	2,038	2,038	---	2,493	2,493
EMR	170,637	8,422	179,059	219,242	10,457	229,699	268,835	11,645	280,480
EMR-ENER	46,428	2,100	48,528	67,992	2,350	70,342	78,902	2,690	81,592
EMR-MES	124,209	6,322	130,531	151,250	8,107	159,357	189,933	8,955	198,888
AECB	775	---	775	1,099	---	1,099	2,071	---	2,071
AECL	96,772	---	96,772	114,182	---	114,182	132,384	---	132,384
NEB	382	1,307	1,689	495	1,681	2,176	501	1,689	2,190
ENV-FOR	50,280	---	50,280	58,293	---	58,293	69,362	---	69,362
F&O	112,903	3,500	116,403	126,541	3,430	129,971	142,001	3,792	145,793
F&O-FM	112,903	3,500	116,403	126,541	3,430	129,971	142,001	3,792	145,793
ITC	95,928	1,562	97,490	140,611	2,935	143,546	170,575	2,739	173,314
ITC-TI	94,700	1,217	95,917	139,473	2,556	142,029	169,515	2,360	171,875
ITC-TOUR	---	345	345	---	379	379	---	379	379
ITC-GO	1,228	---	1,228	1,138	---	1,138	1,060	---	1,060
LAB	---	3,813	3,813	---	4,191	4,191	---	4,724	4,724
REE	771	1,712	2,483	957	2,330	3,287	5,588	2,697	8,285
ST	1,358	7,004	8,362	1,553	8,035	9,588	1,895	8,917	10,812
NRC	226,102	---	226,102	297,374	---	297,374	360,692	---	360,692
NRC-SIR	211,444	---	211,444	278,784	---	278,784	339,027	---	339,027
NRC-STI	14,658	---	14,658	18,590	---	18,590	21,665	---	21,665
NSERC	162,871	---	162,871	201,803	---	201,803	227,081	---	227,081
SC	---	2,890	2,890	---	3,542	3,542	---	4,047	4,047
SS	14,391	562	14,953	14,561	556	15,117	14,574	554	15,128
SS-SUPP	14,391	562	14,953	14,561	556	15,117	14,574	554	15,128
TPT	16,117	1,034	17,151	20,063	1,300	21,363	22,281	1,669	23,950
TPT-ADM	5,153	933	6,086	8,233	1,180	9,413	9,120	1,504	10,624
TPT-MAR	8,513	---	8,513	8,927	---	8,927	9,911	---	9,911
TPT-AIR	2,407	---	2,407	2,843	---	2,843	3,164	---	3,164
TPT-SUR	44	101	145	60	120	180	86	165	251
CTC	---	2,758	2,758	---	2,715	2,715	---	3,255	3,255
TOTAL CC	1,176,120	45,210	1,221,330	1,456,869	54,347	1,511,216	1,693,782	60,894	1,754,676
EXTERNAL AFFAIRS AND DEFENCE CABINET COMMITTEE									
EA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
EA-CIA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
CIDA	32,234	4,257	36,491	35,739	4,636	40,375	39,694	5,280	44,974
IDRC	20,110	19,688	39,798	24,439	21,600	46,039	29,896	26,730	56,626
IJC	2,328	---	2,328	2,771	---	2,771	2,988	---	2,988
NDEF	100,534	2,037	102,571	109,693	2,333	112,026	136,995	2,575	139,570
NDEF-SER	100,534	2,037	102,571	109,693	2,333	112,026	136,995	2,575	139,570
TOTAL CC	155,206	31,911	187,117	172,642	35,219	207,861	209,573	41,805	251,378

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CABINET COMMITTEE

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	NATURAL	HUMAN	TOTAL	NATURAL	HUMAN	TOTAL	NATURAL	HUMAN	TOTAL
SOCIAL DEVELOPMENT CABINET COMMITTEE									
COMM-AC	---	657	657	---	983	983	---	815	815
CBC	---	3,636	3,636	---	4,042	4,042	---	4,607	4,607
CRTC	---	602	602	---	679	679	---	819	819
NFB	634	---	634	603	---	603	697	---	697
NLIB	---	17,245	17,245	---	21,609	21,609	---	25,842	25,842
NMUS	18,811	35,204	54,015	21,012	37,643	58,655	22,387	39,486	61,793
PA	---	10,817	10,817	---	11,960	11,960	---	13,689	13,689
SSHRC	---	42,378	42,378	---	46,601	46,601	---	56,676	56,676
EI	---	9,529	9,529	---	9,602	9,602	---	10,180	10,180
EI-ADM	---	9,529	9,529	---	9,602	9,602	---	10,180	10,180
CEIC	---	7,758	7,758	---	9,255	9,255	---	8,126	8,126
ENV	181,371	15,499	196,870	203,725	17,000	220,725	245,322	19,419	264,741
ENV-ADM	1,579	261	1,840	1,621	308	1,929	1,682	438	2,120
ENV-EPS	8,760	---	8,760	8,170	---	8,170	10,000	---	10,000
ENV-AES	115,833	---	115,833	134,107	---	134,107	164,750	---	164,750
ENV-ECS	53,633	4,192	57,825	58,104	4,542	62,646	66,971	5,471	72,442
ENV-PC	1,566	11,046	12,612	1,723	12,150	13,873	1,919	13,510	15,429
IAND	3,020	1,937	4,957	3,368	3,054	6,422	3,673	3,225	6,898
IAND-IIA	---	---	---	---	380	380	---	395	395
IAND-MA	3,020	1,937	4,957	3,368	2,674	6,042	3,673	2,830	6,503
JUST	---	4,281	4,281	---	6,012	6,012	---	8,114	8,114
JUST-ADM	---	2,729	2,729	---	3,912	3,912	---	6,814	6,814
JUST-CUIO	---	1,552	1,552	---	2,100	2,100	---	2,100	2,100
CHRC	---	304	304	---	288	288	---	325	325
LRC	---	1,466	1,466	---	2,349	2,349	---	2,938	2,938
NHW	48,747	15,065	63,812	53,929	18,685	72,614	60,184	20,727	80,911
NHW-ADM	---	5,974	5,974	---	8,061	8,061	---	8,999	8,999
NHW-HSS	8,696	8,560	17,256	8,731	10,012	18,743	7,755	10,811	18,566
NHW-MS	2,086	---	2,086	3,918	---	3,918	2,167	---	2,167
NHW-HP	37,965	---	37,965	41,280	---	41,280	50,262	---	50,262
NHW-IS	---	531	531	---	612	612	---	917	917
MRC	82,031	---	82,031	100,167	---	100,167	112,884	---	112,884
CMHC	3,126	9,454	12,580	4,784	11,031	15,815	5,215	11,671	16,886
SECS	---	9,073	9,073	---	10,017	10,017	---	10,941	10,941
SECS-OL	---	853	853	---	816	816	---	1,031	1,031
SECS-ES	---	139	139	---	415	415	---	895	895
SECS-TRA	---	5,121	5,121	---	5,681	5,681	---	5,335	5,335
SECS-CIT	---	2,960	2,960	---	3,105	3,105	---	3,688	3,688
SGEN	---	4,175	4,175	---	5,669	5,669	---	5,169	5,169
SGEN-ADM	---	4,175	4,175	---	5,669	5,669	---	5,169	5,169
RCMP	71	---	71	295	---	295	388	---	388
TOTAL CC	337,811	189,888	526,891	387,883	216,479	604,362	450,582	242,769	693,351
SERVICE TO GOVERNMENT CABINET COMMITTEE									
FIN	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FIN-FEP	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
NREV	---	4,486	4,486	---	10,718	10,718	---	6,986	6,986
NREV-TAX	---	4,486	4,486	---	10,718	10,718	---	6,986	6,986
PC	---	549	549	---	589	589	---	89	89
COL	---	975	975	---	1,172	1,172	---	3,897	3,897
ECC	---	8,030	8,030	---	7,392	7,392	---	7,814	7,814
PW	8,310	---	8,310	7,657	---	7,657	8,138	---	8,138
PW-PTS	8,310	---	8,310	7,657	---	7,657	8,138	---	8,138
NCC	168	92	252	250	337	587	425	209	634
PSC	---	---	---	---	---	---	---	---	---
STCAN	---	144,134	144,134	---	229,965	229,965	---	187,219	187,219
TB	---	10,666	10,666	---	12,927	12,927	---	15,444	15,444
TB-ADM	---	10,666	10,666	---	12,927	12,927	---	15,444	15,444
TOTAL CC	8,478	177,446	185,916	7,907	273,177	281,084	8,563	233,471	242,034
TOTAL	1,677,687	443,647	2,121,254	2,025,301	579,222	2,604,523	2,362,588	578,939	2,941,439

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY PERFORMER, 1980-1983

ECONOMIC DEVELOPMENT CABINET COMMITTEE

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	733,850	(60.1)	852,817	(56.4)	1,006,660	(57.4)
INDUSTRY	241,459	(19.8)	342,691	(22.7)	384,742	(21.9)
UNIVERSITIES	184,759	(15.1)	230,759	(15.3)	258,607	(14.7)
NON-PROFIT INSTITUTIONS	9,038	(0.7)	12,522	(0.8)	15,952	(0.9)
PROVINCIAL & MUNICIPAL	33,931	(2.8)	48,629	(3.2)	64,058	(3.7)
FOREIGN	10,689	(0.9)	14,249	(0.9)	13,908	(0.8)
OTHER CANADIAN	7,604	(0.6)	10,349	(0.7)	10,749	(0.6)
TOTAL	1,221,330	(100.0)	1,511,216	(100.0)	1,754,676	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY PERFORMER, 1980-1983

SOCIAL DEVELOPMENT CABINET COMMITTEE

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	342,396	(65.0)	389,072	(64.4)	450,829	(65.0)
INDUSTRY	14,804	(2.8)	17,490	(2.9)	20,950	(3.0)
UNIVERSITIES	128,046	(24.3)	150,177	(24.8)	171,186	(24.7)
NON-PROFIT INSTITUTIONS	12,520	(2.4)	13,373	(2.2)	14,288	(2.1)
PROVINCIAL & MUNICIPAL	12,498	(2.4)	13,873	(2.3)	15,658	(2.3)
FOREIGN	7,323	(1.4)	9,756	(1.6)	9,488	(1.4)
OTHER CANADIAN	9,304	(1.8)	10,621	(1.8)	10,960	(1.6)
TOTAL	526,891	(100.0)	604,362	(100.0)	693,351	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY PERFORMER, 1980-1983

EXTERNAL AFFAIRS AND DEFENCE CABINET COMMITTEE

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	94,521	(50.5)	99,896	(48.1)	112,729	(44.8)
INDUSTRY	45,444	(24.3)	54,433	(26.2)	74,279	(29.5)
UNIVERSITIES	6,862	(3.7)	9,191	(4.4)	11,284	(4.5)
NON-PROFIT INSTITUTIONS	317	(0.2)	391	(0.2)	643	(0.3)
PROVINCIAL & MUNICIPAL	120	(0.1)	150	(0.1)	287	(0.1)
FOREIGN	39,233	(21.0)	43,227	(20.8)	51,553	(20.5)
OTHER CANADIAN	620	(0.3)	573	(0.3)	763	(0.3)
TOTAL	187,117	(100.0)	207,861	(100.0)	251,378	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY PERFORMER, 1980-1983

SERVICE TO GOVERNMENT CABINET COMMITTEE

($ THOUSANDS)

PERFORMER	1980-81		1981-82		1982-83	
	$	%	$	%	$	%
INTRAMURAL	180,216	(96.9)	277,419	(98.7)	238,443	(98.5)
INDUSTRY	4,392	(2.4)	2,443	(0.9)	2,973	(1.2)
UNIVERSITIES	289	(0.2)	218	(0.1)	168	(0.1)
NON-PROFIT INSTITUTIONS	672	(0.4)	698	(0.2)	274	(0.1)
PROVINCIAL & MUNICIPAL	10	(0.0)	11	(0.0)	58	(0.0)
FOREIGN	226	(0.1)	261	(0.1)	126	(0.1)
OTHER CANADIAN	111	(0.1)	34	(0.0)	0	(0.0)
TOTAL	185,916	(100.0)	281,084	(100.0)	242,034	(100.0)

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CABINET COMMITTEE

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
ECONOMIC DEVELOPMENT CABINET COMMITTEE									
AGR	142,902	9,467	152,369	158,460	10,062	168,522	186,853	10,016	196,869
AGR-ADM	---	4,200	4,200	---	4,783	4,783	---	5,084	5,084
AGR-DEV	136,962	3,734	140,696	151,704	3,417	155,121	176,155	2,659	178,814
AGR-RI	4,590	---	4,590	5,103	---	5,103	7,981	---	7,981
AGR-CGC	1,350	1,533	2,883	1,653	1,862	3,515	1,917	2,273	4,190
CDC	---	598	598	---	2,200	2,200	---	2,500	2,500
CLFB	71	18	89	71	21	92	117	28	145
COMM-COMM	68,694	4,628	65,322	76,783	4,517	81,300	61,890	4,836	66,726
CCA	2,662	14,762	17,424	3,623	15,495	19,118	4,637	18,538	23,175
CCA-ADM	---	---	---	3,032	---	3,032	3,855	---	3,855
CCA-CON	1,411	2,170	3,581	---	2,435	2,435	---	2,850	2,850
CCA-COR	788	12,375	13,163	---	12,537	12,537	---	14,881	14,881
CCA-CICP	463	217	680	591	523	1,114	782	807	1,589
ED	---	1,677	1,677	---	2,038	2,038	---	2,493	2,493
EMR	138,845	49,014	179,859	174,237	55,462	229,699	214,472	66,008	280,480
EMR-ENER	45,851	2,677	48,528	65,751	4,591	70,342	75,159	6,433	81,592
EMR-MES	84,194	46,337	130,531	108,486	50,871	159,357	139,313	59,575	198,888
ECB	775	---	775	1,099	---	1,099	2,071	---	2,071
AECL	78,848	17,924	96,772	96,202	17,980	114,182	110,505	21,879	132,384
NEB	---	1,689	1,689	---	2,176	2,176	---	2,190	2,190
ENV-FOR	45,530	4,750	50,280	53,450	4,843	58,293	63,819	5,543	69,362
F&O	57,509	58,894	116,403	64,011	65,960	129,971	64,913	80,880	145,793
F&O-FM	57,509	58,894	116,403	64,011	65,960	129,971	64,913	80,880	145,793
ITC	94,189	3,301	97,490	139,343	4,203	143,546	168,628	4,686	173,314
ITC-TI	92,714	3,203	95,917	137,934	4,095	142,029	167,297	4,578	171,875
ITC-TOUR	247	98	345	271	108	379	271	108	379
ITC-GO	1,228	---	1,228	1,138	---	1,138	1,060	---	1,060
LAB	603	3,210	3,813	662	3,529	4,191	745	3,979	4,724
REE	872	1,611	2,483	1,071	2,216	3,287	1,258	7,027	8,285
ST	1,358	7,004	8,362	1,553	8,035	9,588	1,895	8,917	10,812
NRC	189,977	36,125	226,102	254,997	42,377	297,374	312,448	48,244	360,692
NRC-SIR	189,977	21,467	211,444	254,997	23,787	278,784	312,448	26,579	339,027
NRC-STI	---	14,658	14,658	---	18,590	18,590	---	21,665	21,665
NSERC	146,238	16,633	162,871	188,023	21,780	201,803	202,484	24,597	227,081
SC	1,498	1,392	2,890	1,912	1,630	3,542	2,201	1,846	4,047
SS	12,383	2,570	14,953	12,574	2,543	15,117	12,583	2,545	15,128
SS-SUPP	12,383	2,570	14,953	12,574	2,543	15,117	12,583	2,545	15,128
TPT	5,350	11,801	17,151	9,120	12,243	21,363	15,777	8,173	23,950
TPT-ADM	3,600	2,486	6,086	5,584	3,829	9,413	6,069	4,555	10,624
TPT-MAR	1,321	7,192	8,513	2,809	6,118	8,927	8,445	1,466	9,911
TPT-AIR	303	2,104	2,407	583	2,260	2,843	1,048	2,116	3,164
TPT-SUR	126	19	145	144	36	180	215	36	251
CTC	1,439	1,319	2,758	1,462	1,253	2,715	1,732	1,523	3,255
TOTAL CC	972,943	248,387	1,221,330	1,230,653	280,563	1,511,216	1,428,228	326,448	1,754,676
EXTERNAL AFFAIRS AND DEFENCE CABINET COMMITTEE									
EA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
EA-CIA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
CIDA	10,044	26,447	36,491	11,315	29,060	40,375	12,846	32,128	44,974
IDRC	33,170	6,628	39,798	37,837	8,202	46,039	46,584	10,042	56,626
IJC	---	2,328	2,328	---	2,771	2,771	---	2,988	2,988
NDEF	100,493	2,078	102,571	109,624	2,402	112,026	136,923	2,647	139,570
NDEF-SER	100,493	2,078	102,571	109,624	2,402	112,026	136,923	2,647	139,570
TOTAL CC	143,707	43,410	187,117	158,776	49,085	207,861	196,353	55,025	251,378

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CABINET COMMITTEE

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81 R&D	1980-81 RSA	1980-81 TOTAL	1981-82 R&D	1981-82 RSA	1981-82 TOTAL	1982-83 R&D	1982-83 RSA	1982-83 TOTAL
SOCIAL DEVELOPMENT CABINET COMMITTEE									
COMM-AC	---	657	657	---	983	983	---	815	815
CBC	---	3,636	3,636	---	4,042	4,042	---	4,607	4,607
CRTC	602	---	602	679	---	679	819	---	819
NFB	382	252	634	427	176	603	497	200	697
NLIB	---	17,245	17,245	---	21,609	21,609	---	25,842	25,842
NMUS	2,891	51,124	54,015	5,759	52,896	58,655	6,417	55,376	61,793
PA	---	10,817	10,817	---	11,960	11,960	---	13,689	13,689
SSHRC	25,568	16,810	42,378	27,874	18,727	46,601	35,726	20,950	56,676
EI	1,528	8,001	9,529	1,477	8,125	9,602	1,568	8,612	10,180
EI-ADM	1,528	8,001	9,529	1,477	8,125	9,602	1,568	8,612	10,180
CEIC	---	7,758	7,758	---	9,255	9,255	---	8,126	8,126
ENV	42,646	154,224	196,870	47,953	172,772	220,725	56,849	207,892	264,741
ENV-ADM	399	1,441	1,840	432	1,497	1,929	475	1,645	2,120
ENV-EPS	5,388	3,372	8,760	5,348	2,822	8,170	7,108	2,892	10,000
ENV-AES	18,860	96,973	115,833	22,627	111,480	134,107	26,807	137,943	164,750
ENV-ECS	17,533	40,292	57,825	19,035	43,611	62,646	21,888	50,554	72,442
ENV-PC	466	12,146	12,612	511	13,362	13,873	571	14,858	15,429
IAND	3,423	1,534	4,957	3,748	2,674	6,422	4,158	2,740	6,898
IAND-IIA	---	---	---	2	378	380	13	382	395
IAND-NA	3,423	1,534	4,957	3,746	2,296	6,042	4,145	2,358	6,503
JUST	1,950	2,331	4,281	3,022	2,990	6,012	4,852	3,262	8,114
JUST-ADM	1,950	779	2,729	3,022	890	3,912	4,852	1,162	6,014
JUST-CUIO	---	1,552	1,552	---	2,100	2,100	---	2,100	2,100
CHRC	---	304	304	---	288	288	---	325	325
LRC	913	553	1,466	1,467	882	2,349	1,750	1,188	2,938
NHW	27,568	36,244	63,812	31,804	40,810	72,614	32,575	48,336	80,911
NHW-ADM	1,677	4,297	5,974	2,161	5,900	8,061	2,522	6,477	8,999
NHW-HSS	12,576	4,680	17,256	13,308	5,435	18,743	12,495	6,071	18,566
NHW-MS	2,086	---	2,086	3,918	---	3,918	2,167	---	2,167
NHW-HP	11,229	26,736	37,965	12,417	28,863	41,280	15,391	34,871	50,262
NHW-IS	---	531	531	---	612	612	---	917	917
MRC	79,461	2,570	82,031	96,849	3,318	100,167	109,146	3,738	112,884
CMHC	4,573	8,007	12,580	6,047	9,768	15,815	6,495	10,391	16,886
SECS	5,845	3,228	9,073	5,992	4,025	10,017	6,415	4,526	10,941
SECS-OL	480	373	853	509	307	816	724	307	1,031
SECS-ES	---	139	139	---	415	415	---	895	895
SECS-TRA	2,868	2,253	5,121	3,200	2,481	5,681	3,108	2,227	5,335
SECS-CIT	2,497	463	2,960	2,283	822	3,105	2,583	1,097	3,680
SGEN	2,415	1,760	4,175	3,013	2,656	5,669	3,013	2,156	5,169
SGEN-ADM	2,415	1,760	4,175	3,013	2,656	5,669	3,013	2,156	5,169
RCMP	71	---	71	295	---	295	300	---	300
TOTAL CC	199,836	327,055	526,891	236,406	367,956	604,362	270,588	422,771	693,351
SERVICE TO GOVERNMENT CABINET COMMITTEE									
FIN	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FIN-FEP	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
NREV	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
NREV-TAX	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
PC	549	---	549	589	---	589	89	---	89
COL	---	975	975	---	1,172	1,172	---	3,897	3,897
ECC	7,019	1,011	8,030	6,440	952	7,392	6,814	1,000	7,814
PW	4,260	4,050	8,310	1,408	6,249	7,657	2,380	5,758	8,138
PW-PTS	4,260	4,050	8,310	1,408	6,249	7,657	2,380	5,758	8,138
NCC	10	242	252	16	571	587	10	624	634
PSC	---	---	---	---	---	---	---	---	---
STCAN	5,828	138,306	144,134	8,108	221,857	229,965	9,324	177,895	187,219
TB	113	10,553	10,666	113	12,814	12,927	128	15,316	15,444
TB-ADM	113	10,553	10,666	113	12,814	12,927	128	15,316	15,444
TOTAL CC	18,686	167,318	185,916	17,582	263,582	281,084	19,541	222,493	242,034
TOTAL	1,335,892	786,162	2,121,254	1,643,337	961,186	2,604,523	1,914,782	1,026,737	2,941,439

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CABINET COMMITTEE

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
ECONOMIC DEVELOPMENT CABINET COMMITTEE									
AGR	142,852	8,267	151,119	158,410	8,374	166,784	186,003	8,278	194,281
AGR-ADM	---	4,200	4,200	---	4,783	4,783	---	5,084	5,084
AGR-DEV	136,912	2,534	139,446	151,654	1,729	153,383	176,105	921	177,026
AGR-RI	4,598	---	4,598	5,103	---	5,103	7,981	---	7,981
AGR-CGC	1,350	1,533	2,883	1,653	1,862	3,515	1,917	2,273	4,190
CDC	---	598	598	---	2,200	2,200	---	2,500	2,500
CLFB	---	---	---	---	---	---	---	---	---
COMM-COMM	60,581	70	60,571	76,069	70	76,139	61,330	100	61,430
CCA	---	14,545	14,545	---	14,972	14,972	---	17,731	17,731
CCA-ADM	---	---	---	---	---	---	---	---	---
CCA-CON	---	2,170	2,170	---	2,435	2,435	---	2,850	2,850
CCA-COR	---	12,375	12,375	---	12,537	12,537	---	14,881	14,881
CCA-CICP	---	---	---	---	---	---	---	---	---
ED	---	---	---	---	---	---	---	---	---
EMR	128,487	42,230	170,637	172,372	46,870	219,242	211,661	57,174	268,835
EMR-ENER	45,851	577	46,428	65,751	2,241	67,992	75,159	3,743	78,902
EMR-MES	82,556	41,653	124,209	106,621	44,629	151,250	136,502	53,431	189,933
AECB	775	---	775	1,099	---	1,099	2,071	---	2,071
AECL	78,848	17,924	96,772	96,282	17,980	114,182	110,505	21,879	132,384
NEB	---	382	382	---	495	495	---	501	501
ENV-FOR	45,530	4,750	50,280	53,450	4,843	58,293	63,819	5,543	69,362
F&O	56,684	56,219	112,903	63,157	63,384	126,541	63,967	78,034	142,001
F&O-FM	56,684	56,219	112,903	63,157	63,384	126,541	63,967	78,034	142,001
ITC	93,200	2,728	95,928	137,821	3,598	140,611	166,302	4,273	170,575
ITC-TI	91,972	2,728	94,700	135,883	3,598	139,473	165,242	4,273	169,515
ITC-TOUR	---	---	---	---	---	---	---	---	---
ITC-GO	1,228	---	1,228	1,138	---	1,138	1,060	---	1,060
LAB	---	---	---	---	---	---	---	---	---
REE	---	771	771	---	957	957	---	5,588	5,588
ST	1,358	---	1,358	1,553	---	1,553	1,895	---	1,895
NRC	189,977	36,125	226,102	254,997	42,377	297,374	312,448	48,244	360,692
NRC-SIR	189,977	21,467	211,444	254,997	23,787	278,784	312,448	26,579	339,027
NRC-STI	---	14,658	14,658	---	18,590	18,590	---	21,665	21,665
NSERC	146,238	16,633	162,871	180,823	21,780	201,803	202,484	24,597	227,081
SC	---	---	---	---	---	---	---	---	---
SS	12,172	2,219	14,391	12,376	2,185	14,561	12,387	2,187	14,574
SS-SUPP	12,172	2,219	14,391	12,376	2,185	14,561	12,387	2,187	14,574
TPT	5,232	10,885	16,117	8,972	11,091	20,063	15,582	6,699	22,281
TPT-ADM	3,583	1,570	5,153	5,556	2,677	8,233	6,039	3,081	9,120
TPT-MAR	1,321	7,192	8,513	2,809	6,118	8,927	8,445	1,466	9,911
TPT-AIR	303	2,104	2,407	583	2,260	2,843	1,048	2,116	3,164
TPT-SUR	25	19	44	24	36	60	50	36	86
CTC	---	---	---	---	---	---	---	---	---
TOTAL CC	961,774	214,346	1,176,120	1,215,701	241,168	1,456,869	1,410,454	283,328	1,693,782
EXTERNAL AFFAIRS AND DEFENCE CABINET COMMITTEE									
EA	---	---	---	---	---	---	---	---	---
EA-CIA	---	---	---	---	---	---	---	---	---
CIDA	8,595	23,639	32,234	9,789	26,038	35,739	11,062	28,632	39,694
IDRC	19,167	943	20,110	23,044	1,395	24,439	28,182	1,714	29,896
IJC	---	2,328	2,328	---	2,771	2,771	---	2,988	2,988
NDEF	99,780	754	100,534	108,827	866	109,693	136,825	970	136,995
NDEF-SER	99,780	754	100,534	108,827	866	109,693	136,825	970	136,995
TOTAL CC	127,542	27,664	155,206	141,588	31,062	172,642	175,269	34,304	209,573

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CABINET COMMITTEE

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81 R&D	1980-81 RSA	1980-81 TOTAL	1981-82 R&D	1981-82 RSA	1981-82 TOTAL	1982-83 R&D	1982-83 RSA	1982-83 TOTAL
SOCIAL DEVELOPMENT CABINET COMMITTEE									
COMM-AC	---	---	---	---	---	---	---	---	---
CBC	---	---	---	---	---	---	---	---	---
CRTC	---	---	---	---	---	---	---	---	---
NFB	382	252	634	427	176	603	497	200	697
NLIB	---	---	---	---	---	---	---	---	---
NMUS	1,082	17,729	18,811	2,173	18,839	21,012	1,319	20,988	22,307
PA	---	---	---	---	---	---	---	---	---
SSHRC	---	---	---	---	---	---	---	---	---
EI	---	---	---	---	---	---	---	---	---
EI-ADM	---	---	---	---	---	---	---	---	---
CEIC	---	---	---	---	---	---	---	---	---
ENV	41,806	139,565	181,371	47,839	156,686	203,725	55,766	189,556	245,322
ENV-ADM	399	1,180	1,579	432	1,189	1,621	475	1,207	1,682
ENV-EPS	5,388	3,372	8,760	5,348	2,822	8,170	7,108	2,892	10,000
ENV-AES	18,860	96,973	115,833	22,627	111,480	134,107	26,807	137,943	164,750
ENV-ECS	16,810	36,823	53,633	18,250	39,854	58,104	20,950	46,021	66,971
ENV-PC	349	1,217	1,566	382	1,341	1,723	426	1,493	1,919
IAND	2,246	774	3,020	2,587	781	3,368	2,810	863	3,673
IAND-IIA	---	---	---	---	---	---	---	---	---
IAND-NA	2,246	774	3,020	2,587	781	3,368	2,810	863	3,673
JUST	---	---	---	---	---	---	---	---	---
JUST-ADM	---	---	---	---	---	---	---	---	---
JUST-CUIO	---	---	---	---	---	---	---	---	---
CHRC	---	---	---	---	---	---	---	---	---
LRC	---	---	---	---	---	---	---	---	---
NHW	19,581	29,166	48,747	23,058	30,871	53,929	23,306	36,878	60,184
NHW-ADM	---	---	---	---	---	---	---	---	---
NHW-HSS	6,266	2,430	8,696	6,723	2,008	8,731	5,748	2,007	7,755
NHW-MS	2,086	---	2,086	3,918	---	3,918	2,167	---	2,167
NHW-HP	11,229	26,736	37,965	12,417	28,863	41,280	15,391	34,871	50,262
NHW-IS	---	---	---	---	---	---	---	---	---
MRC	79,461	2,570	82,031	96,849	3,318	100,167	109,146	3,738	112,884
CMHC	1,815	1,311	3,126	2,747	2,037	4,784	3,040	2,175	5,215
SECS	---	---	---	---	---	---	---	---	---
SECS-OL	---	---	---	---	---	---	---	---	---
SECS-ES	---	---	---	---	---	---	---	---	---
SECS-TRA	---	---	---	---	---	---	---	---	---
SECS-CIT	---	---	---	---	---	---	---	---	---
SGEN	---	---	---	---	---	---	---	---	---
SGEN-ADM	---	---	---	---	---	---	---	---	---
RCMP	71	---	71	295	---	295	300	---	300
TOTAL CC	146,444	191,367	337,811	175,175	212,788	387,883	196,184	254,398	450,582
SERVICE TO GOVERNMENT CABINET COMMITTEE									
FIN	---	---	---	---	---	---	---	---	---
FIN-FEP	---	---	---	---	---	---	---	---	---
NREV	---	---	---	---	---	---	---	---	---
NREV-TAX	---	---	---	---	---	---	---	---	---
PC	---	---	---	---	---	---	---	---	---
COL	---	---	---	---	---	---	---	---	---
ECC	---	---	---	---	---	---	---	---	---
PW	4,260	4,050	8,310	1,400	6,249	7,657	2,380	5,750	8,130
PW-PTS	4,260	4,050	8,310	1,400	6,249	7,657	2,380	5,750	8,130
NCC	---	160	160	---	250	250	---	425	425
PSC	---	---	---	---	---	---	---	---	---
STCAN	---	---	---	---	---	---	---	---	---
TB	---	---	---	---	---	---	---	---	---
TB-ADM	---	---	---	---	---	---	---	---	---
TOTAL CC	4,260	4,210	8,470	1,400	6,499	7,907	2,380	6,183	8,563
TOTAL	1,240,820	437,587	1,677,607	1,533,864	491,437	2,025,301	1,784,287	578,213	2,362,500

*** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

ECONOMIC DEVELOPMENT CABINET COMMITTEE

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	43	4,496	299	4,812	1,236	2,321	0	12,406
INTRAMURAL RSA	18	778	237	1,135	717	378	0	3,245
ADMIN. OF EXTRAMURAL PROGRAMS	8	126	197	24	177	26	0	557
TOTAL	69	5,392	732	5,171	2,129	2,716	0	16,289
1981-82								
INTRAMURAL R&D	48	4,690	310	4,128	1,253	2,371	0	12,800
INTRAMURAL RSA	21	774	263	1,121	734	435	0	3,347
ADMIN. OF EXTRAMURAL PROGRAMS	11	122	281	28	190	28	0	579
TOTAL	80	5,586	774	5,276	2,177	2,833	0	16,726
1982-83								
INTRAMURAL R&D	89	4,732	285	4,841	1,379	2,439	0	12,964
INTRAMURAL RSA	17	787	381	1,184	787	478	0	3,392
ADMIN. OF EXTRAMURAL PROGRAMS	12	151	266	38	284	33	0	785
TOTAL	118	5,589	852	5,183	2,378	2,950	0	17,861

SOCIAL DEVELOPMENT CABINET COMMITTEE

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	11	573	147	192	157	56	0	1,136
INTRAMURAL R&A	38	1,139	289	1,688	742	173	0	4,068
ADMIN. OF EXTRAMURAL PROGRAMS	7	22	22	2	39	0	0	91
TOTAL	47	1,735	458	1,881	938	229	0	5,287
1981-82								
INTRAMURAL R&D	11	592	147	194	159	56	0	1,159
INTRAMURAL R&A	32	1,146	298	1,686	751	169	0	4,074
ADMIN. OF EXTRAMURAL PROGRAMS	7	24	24	4	39	0	0	96
TOTAL	49	1,761	461	1,883	950	225	0	5,329
1982-83								
INTRAMURAL R&D	11	682	148	199	169	56	0	1,185
INTRAMURAL R&A	33	1,159	295	1,687	778	155	0	4,098
ADMIN. OF EXTRAMURAL PROGRAMS	7	22	25	4	42	0	0	98
TOTAL	58	1,782	468	1,889	982	211	0	5,382

EXTERNAL AFFAIRS AND DEFENCE CABINET COMMITTEE

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	12	511	184	480	209	271	143	1,730
INTRAMURAL RSA	7	17	7	5	43	0	0	79
ADMIN. OF EXTRAMURAL PROGRAMS	2	48	14	7	39	0	10	120
TOTAL	21	576	125	492	291	271	153	1,928
1981-82								
INTRAMURAL R&D	12	522	91	486	206	268	151	1,736
INTRAMURAL RSA	7	17	7	6	42	0	0	79
ADMIN. OF EXTRAMURAL PROGRAMS	3	57	14	7	40	0	10	130
TOTAL	22	596	112	499	288	268	161	1,945
1982-83								
INTRAMURAL R&D	12	524	91	487	206	267	151	1,738
INTRAMURAL RSA	7	17	9	5	43	0	0	81
ADMIN. OF EXTRAMURAL PROGRAMS	3	63	14	7	43	0	10	139
TOTAL	22	603	114	499	292	267	161	1,957

SERVICE TO GOVERNMENT CABINET COMMITTEE

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	0	6	0	1	0	0	0	7
INTRAMURAL RSA	0	31	7	6	1	0	0	45
ADMIN. OF EXTRAMURAL PROGRAMS	0	8	0	3	0	0	0	11
TOTAL	0	45	7	9	1	0	0	63
1981-82								
INTRAMURAL R&D	0	5	0	0	0	0	0	5
INTRAMURAL RSA	0	29	9	6	2	0	0	47
ADMIN. OF EXTRAMURAL PROGRAMS	0	9	0	3	0	0	0	12
TOTAL	0	42	9	9	2	0	0	63
1982-83								
INTRAMURAL R&D	0	10	0	0	0	0	0	10
INTRAMURAL RSA	0	28	10	2	5	0	0	45
ADMIN. OF EXTRAMURAL PROGRAMS	0	2	0	0	2	0	0	4
TOTAL	0	40	10	2	7	0	0	59

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CABINET COMMITTEE

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
ECONOMIC DEVELOPMENT CABINET COMMITTEE									
AGR	50	1,200	1,250	50	1,688	1,738	50	1,738	1,788
AGR-ADM	---	---	---	---	---	---	---	---	---
AGR-DEV	50	1,200	1,250	50	1,688	1,738	50	1,738	1,788
AGR-RI	---	---	---	---	---	---	---	---	---
AGR-CGC	---	---	---	---	---	---	---	---	---
CDC	---	---	---	---	---	---	---	---	---
CLFB	71	18	89	71	21	92	117	28	145
COMM-COMM	193	4,558	4,751	714	4,447	5,161	560	4,736	5,296
CCA	2,662	217	2,879	3,623	523	4,146	4,637	807	5,444
CCA-ADM	---	---	---	3,032	---	3,032	3,855	---	3,855
CCA-CON	1,411	---	1,411	---	---	---	---	---	---
CCA-COR	788	---	788	---	---	---	---	---	---
CCA-CICP	463	217	680	591	523	1,114	782	807	1,589
ED	---	1,677	1,677	---	2,038	2,038	---	2,493	2,493
EMR	1,638	6,784	8,422	1,865	8,592	10,457	2,811	8,834	11,645
EMR-ENER	---	2,100	2,100	---	2,350	2,350	---	2,690	2,690
EMR-MES	1,638	4,684	6,322	1,865	6,242	8,107	2,811	6,144	8,955
AECB	---	---	---	---	---	---	---	---	---
AECL	---	---	---	---	---	---	---	---	---
NEB	---	1,307	1,307	---	1,681	1,681	---	1,689	1,689
ENV-FOR	---	---	---	---	---	---	---	---	---
F&O	825	2,675	3,500	854	2,576	3,430	946	2,846	3,792
F&O-FM	825	2,675	3,500	854	2,576	3,430	946	2,846	3,792
ITC	989	573	1,562	2,322	613	2,935	2,326	413	2,739
ITC-TI	742	475	1,217	2,051	505	2,556	2,055	305	2,360
ITC-TOUR	247	98	345	271	108	379	271	108	379
ITC-GO	---	---	---	---	---	---	---	---	---
LAB	603	3,210	3,813	662	3,529	4,191	745	3,979	4,724
REE	872	840	1,712	1,071	1,259	2,330	1,258	1,439	2,697
ST	---	7,004	7,004	---	8,035	8,035	---	8,917	8,917
NRC	---	---	---	---	---	---	---	---	---
NRC-SIR	---	---	---	---	---	---	---	---	---
NRC-STI	---	---	---	---	---	---	---	---	---
NSERC	---	---	---	---	---	---	---	---	---
SC	1,498	1,392	2,890	1,912	1,630	3,542	2,201	1,846	4,047
SS	211	351	562	198	358	556	196	358	554
SS-SUPP	211	351	562	198	358	556	196	358	554
TPT	118	916	1,034	148	1,152	1,300	195	1,474	1,669
TPT-ADM	17	916	933	28	1,152	1,180	30	1,474	1,504
TPT-MAR	---	---	---	---	---	---	---	---	---
TPT-AIR	---	---	---	---	---	---	---	---	---
TPT-SUR	101	---	101	120	---	120	165	---	165
CTC	1,439	1,319	2,758	1,462	1,253	2,715	1,732	1,523	3,255
TOTAL CC	11,169	34,041	45,210	14,952	39,395	54,347	17,774	43,120	60,894
EXTERNAL AFFAIRS AND DEFENCE CABINET COMMITTEE									
EA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
EA-CIA	---	5,929	5,929	---	6,650	6,650	---	7,220	7,220
CIDA	1,449	2,808	4,257	1,606	3,030	4,636	1,784	3,496	5,280
IDRC	14,003	5,685	19,688	14,793	6,807	21,600	18,402	8,328	26,730
IJC	---	---	---	---	---	---	---	---	---
NDEF	713	1,324	2,037	797	1,536	2,333	898	1,677	2,575
NDEF-SER	713	1,324	2,037	797	1,536	2,333	898	1,677	2,575
TOTAL CC	16,165	15,746	31,911	17,196	18,023	35,219	21,084	20,721	41,805

FEDERAL EXPENDITURES ON SCIENTIFIC ACTIVITIES

BY DEPARTMENT OR AGENCY, BY CABINET COMMITTEE

($ THOUSANDS)

DEPARTMENT OR AGENCY	1980-81			1981-82			1982-83		
	R&D	RSA	TOTAL	R&D	RSA	TOTAL	R&D	RSA	TOTAL
SOCIAL DEVELOPMENT CABINET COMMITTEE									
COMM-AC	---	657	657	---	983	983	---	815	815
CBC	---	3,636	3,636	---	4,042	4,042	---	4,607	4,607
CRTC	602	---	602	679	---	679	819	---	819
NFB	---	---	---	---	---	---	---	---	---
NLIB	---	17,245	17,245	---	21,609	21,609	---	25,842	25,842
NMUS	1,809	33,395	35,204	3,586	34,057	37,643	5,098	34,388	39,486
PA	---	10,817	10,817	---	11,960	11,960	---	13,689	13,689
SSHRC	25,568	16,810	42,378	27,874	18,727	46,601	35,726	20,950	56,676
EI	1,528	8,001	9,529	1,477	8,125	9,602	1,568	8,612	10,180
EI-ADM	1,528	8,001	9,529	1,477	8,125	9,602	1,568	8,612	10,180
CEIC	---	7,758	7,758	---	9,255	9,255	---	8,126	8,126
ENV	840	14,659	15,499	914	16,086	17,000	1,083	18,336	19,419
ENV-ADM	---	261	261	---	308	308	---	438	438
ENV-EPS	---	---	---	---	---	---	---	---	---
ENV-AES	---	---	---	---	---	---	---	---	---
ENV-ECS	723	3,469	4,192	785	3,757	4,542	938	4,533	5,471
ENV-PC	117	10,929	11,046	129	12,021	12,150	145	13,365	13,510
IAND	1,177	760	1,937	1,161	1,893	3,054	1,348	1,877	3,225
IAND-IIA	---	---	---	2	378	380	13	382	395
IAND-NA	1,177	760	1,937	1,159	1,515	2,674	1,335	1,495	2,830
JUST	1,950	2,331	4,281	3,022	2,990	6,012	4,852	3,262	8,114
JUST-ADM	1,950	779	2,729	3,022	890	3,912	4,852	1,162	6,014
JUST-CUIO	---	1,552	1,552	---	2,100	2,100	---	2,100	2,100
CHRC	---	304	304	---	288	288	---	325	325
LRC	913	553	1,466	1,467	882	2,349	1,750	1,188	2,938
NHW	7,987	7,078	15,065	8,746	9,939	18,685	9,269	11,458	20,727
NHW-ADM	1,677	4,297	5,974	2,161	5,900	8,061	2,522	6,477	8,999
NHW-HSS	6,310	2,250	8,560	6,585	3,427	10,012	6,747	4,064	10,811
NHW-MS	---	---	---	---	---	---	---	---	---
NHW-HP	---	---	---	---	---	---	---	---	---
NHW-IS	---	531	531	---	612	612	---	917	917
MRC	---	---	---	---	---	---	---	---	---
CMHC	2,758	6,696	9,454	3,300	7,731	11,031	3,455	8,216	11,671
SECS	5,845	3,228	9,073	5,992	4,025	10,017	6,415	4,526	10,941
SECS-OL	480	373	853	509	307	816	724	307	1,031
SECS-ES	---	139	139	---	415	415	---	895	895
SECS-TRA	2,868	2,253	5,121	3,200	2,481	5,681	3,108	2,227	5,335
SECS-CIT	2,497	463	2,960	2,283	822	3,105	2,583	1,097	3,680
SGEN	2,415	1,760	4,175	3,013	2,656	5,669	3,013	2,156	5,169
SGEN-ADM	2,415	1,760	4,175	3,013	2,656	5,669	3,013	2,156	5,169
RCMP	---	---	---	---	---	---	---	---	---
TOTAL CC	53,392	135,688	189,080	61,231	155,248	216,479	74,396	168,373	242,769
SERVICE TO GOVERNMENT CABINET COMMITTEE									
FIN	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
FIN-FEP	---	8,514	8,514	---	10,077	10,077	---	12,613	12,613
NREV	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
NREV-TAX	827	3,659	4,486	828	9,890	10,718	796	6,190	6,986
PC	549	---	549	589	---	589	89	---	89
COL	---	975	975	---	1,172	1,172	---	3,897	3,897
ECC	7,019	1,011	8,030	6,440	952	7,392	6,814	1,000	7,814
PW	---	---	---	---	---	---	---	---	---
PW-PTS	---	---	---	---	---	---	---	---	---
NCC	10	82	92	16	321	337	10	199	209
PSC	---	---	---	---	---	---	---	---	---
STCAN	5,828	138,306	144,134	8,108	221,857	229,965	9,324	177,895	187,219
TB	113	10,553	10,666	113	12,814	12,927	128	15,316	15,444
TB-ADM	113	10,553	10,666	113	12,814	12,927	128	15,316	15,444
TOTAL CC	14,346	163,100	177,446	16,094	257,083	273,177	17,161	216,310	233,471
TOTAL	95,072	348,575	443,647	109,473	469,749	579,222	130,415	448,524	578,939

** INTRAMURAL EXPENDITURES DO NOT INCLUDE NON-PROGRAM COSTS

ECONOMIC DEVELOPMENT CABINET COMMITTEE

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1988-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1988-81								
INTRAMURAL R&D	9	86	22	17	34	1	0	169
INTRAMURAL RSA	51	278	164	64	221	3	0	782
ADMIN. OF EXTRAMURAL PROGRAMS	0	11	0	0	0	0	0	12
TOTAL	60	374	187	81	256	4	0	963
1981-82								
INTRAMURAL R&D	11	81	23	19	33	1	0	169
INTRAMURAL RSA	57	291	159	66	226	3	0	802
ADMIN. OF EXTRAMURAL PROGRAMS	0	12	0	0	0	0	0	13
TOTAL	68	385	183	85	259	4	0	984
1982-83								
INTRAMURAL R&D	11	88	25	19	34	1	0	178
INTRAMURAL RSA	58	385	167	71	228	2	0	831
ADMIN. OF EXTRAMURAL PROGRAMS	0	12	0	0	0	0	0	13
TOTAL	69	485	193	90	262	3	0	1,022

SOCIAL DEVELOPMENT CABINET COMMITTEE

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	18	125	98	36	88	0	0	348
INTRAMURAL RSA	25	691	281	485	641	166	0	2,288
ADMIN. OF EXTRAMURAL PROGRAMS	7	40	67	6	89	3	0	212
TOTAL	42	855	439	527	817	169	0	2,849
1981-82								
INTRAMURAL R&D	9	129	92	33	87	0	0	349
INTRAMURAL RSA	32	728	267	477	635	150	0	2,288
ADMIN. OF EXTRAMURAL PROGRAMS	7	45	71	3	94	3	0	222
TOTAL	48	893	429	512	816	153	0	2,851
1982-83								
INTRAMURAL R&D	9	134	98	34	91	0	0	358
INTRAMURAL RSA	35	748	288	480	652	139	0	2,327
ADMIN. OF EXTRAMURAL PROGRAMS	7	58	75	3	105	0	0	239
TOTAL	52	924	445	516	848	139	0	2,923

EXTERNAL AFFAIRS AND DEFENCE CABINET COMMITTEE

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	0	1	3	0	5	0	20	29
INTRAMURAL RSA	0	31	73	44	67	0	12	226
ADMIN. OF EXTRAMURAL PROGRAMS	6	40	20	5	34	0	0	105
TOTAL	6	72	96	49	105	0	32	360
1981-82								
INTRAMURAL R&D	0	1	3	0	5	0	20	29
INTRAMURAL RSA	0	27	77	47	63	0	11	224
ADMIN. OF EXTRAMURAL PROGRAMS	6	46	18	8	42	0	0	119
TOTAL	6	74	98	55	109	0	31	372
1982-83								
INTRAMURAL R&D	0	1	3	0	5	0	20	29
INTRAMURAL RSA	0	25	81	44	63	0	11	224
ADMIN. OF EXTRAMURAL PROGRAMS	6	58	18	10	47	0	0	138
TOTAL	6	84	102	54	115	0	31	391

SERVICE TO GOVERNMENT CABINET COMMITTEE

FEDERAL PERSONNEL ENGAGED IN SCIENTIFIC ACTIVITIES
BY CATEGORY, BY ACTIVITY, 1980-83

(FULL-TIME EQUIVALENT PERSON-YEARS)

ACTIVITY	EXECUTIVE	SCIENTIFIC & PROFESSIONAL	ADMINISTR. & FOREIGN SERV.	TECHNICAL	ADMINISTR. SUPPORT	OPERATIONAL	MILITARY	TOTAL
1980-81								
INTRAMURAL R&D	4	127	26	42	70	0	0	269
INTRAMURAL RSA	61	842	1,011	719	2,469	59	0	5,161
ADMIN. OF EXTRAMURAL PROGRAMS	0	0	0	0	0	0	0	0
TOTAL	65	969	1,037	761	2,539	59	0	5,430
1981-82								
INTRAMURAL R&D	4	129	29	50	57	0	0	269
INTRAMURAL RSA	68	902	1,098	761	3,585	82	0	6,416
ADMIN. OF EXTRAMURAL PROGRAMS	0	0	0	0	0	0	0	0
TOTAL	72	1,031	1,127	811	3,562	82	0	6,685
1982-83								
INTRAMURAL R&D	4	129	26	52	50	0	0	261
INTRAMURAL RSA	93	923	1,035	805	2,348	37	0	5,241
ADMIN. OF EXTRAMURAL PROGRAMS	0	0	0	0	0	0	0	0
TOTAL	97	1,052	1,061	857	2,398	37	0	5,502

I SCOPE AND LIMITATIONS OF THE DATA

The expenditure data for scientific activities controlled by federal departments and agencies provided in this document correspond to the budgetary expenditures by program presented in Main Estimates for the approval of Parliament. As a consequence, the following kinds of costs or expenditures are not included:

a) expenditures by federal agencies which do not receive budgetary appropriations, e.g., Petrocan, Canadian National Railways, Air Canada.

b) non-budgetary expenditures for advances, loans, etc.

c) "non-program" costs, i.e., services provided by other departments, accommodation costs, the portion of administration costs attributable to scientific activities where a separate administration program exists.

Depending on the purpose of the analysis, it may or may not be appropriate to include non-program costs. For budgetary analysis and decision-making it is preferable to deal with direct program expenditures only, thereby providing a consistent base for comparing expenditures on scientific and technological (S&T) activities with other types of expenditures in the federal sector.

If the purpose of the analysis is to compare the magnitude of the federal expenditures on S&T activities with those in other sectors in the country and in other countries, then it is preferable to include non-program costs. The sum of direct expenditures plus non-program costs then represents the total cost of the federal S&T effort. With caution, the resulting data may be compared with the S&T effort in industry, where all direct and indirect costs are usually reported. Such "total cost" data are reported by Statistics Canada in The Annual Review of Science Statistics (Cat. No. 13-2-12) and various issues of the Service Bulletin (Cat. No. 13-003). The federal intramural expenditures reported in these latter publications will thus be greater than the same category reported herein. The extramural expenditures, however, are not affected and will be the same in both sets of publications.

II DEFINITIONS

Federal departments and agencies in receipt of budgetary appropriations are requested to identify those resources reported in Main Estimates which are to be used in scientific and technological (S&T) activities in both the natural and the human sciences. The basic reporting units are the budgetary programs used in presenting the Main Estimates.

In the text which follows, the two major fields of science, the natural sciences and the human sciences, and the two kinds of S&T activities scientific research and experimental development and related scientific activities are described, followed by a description of intramural and extramural performance of S&T activities, definitions of the performance sectors and a discussion of the funding mechanisms for extramural performance. Detailed definitions of research and experimental development and of the various related scientific activities for the natural sciences and for the human sciences are then provided and the Appendix closes with the definitions concerning personnel resources.

The definitions used in collecting the data for this report are essentially the same as those used by the OECD in its "Frascati Manual" and by UNESCO in its "Manual for Statistics on Scientific and Technological Activities".

A. NATURAL AND HUMAN SCIENCES

With respect to the two major S&T fields, the term, natural sciences, embraces the disciplines of study concerned with understanding, exploring, developing or utilizing the natural world. Included are the engineering, mathematical, life and physical sciences. The term, human sciences, is to be regarded as synonymous with social sciences and humanities and thus embraces all disciplines involved in studying human actions and conditions and the social, economic and institutional mechanisms affecting humans. Included are such disciplines as anthropology, demography, economics, geography, history, languages, literature and linguistics, law, library science, philosophy, political science, psychology, religious studies, social work, sociology, and urban and regional studies.

In some situations it may be difficult to decide whether an activity falls in the natural or in the human sciences. Nevertheless, an assignment must be made, and respondents are asked to consider the dominant orientation of the work and the nature of the expertise of the personnel involved.

B. SCIENTIFIC AND TECHNOLOGICAL ACTIVITIES

There are two main categories of scientific and technological activities (S&T):

i) (Scientific) research and experimental development (R&D), which is defined as creative work undertaken on a systematic basis in order to increase the stock of knowledge, including the knowledge of man, culture and society, and the use of the stock of knowledge to devise new applications.

ii) Related scientific activities (RSA), which are defined as those activities which complement and extend R&D by contributing to the generation, dissemination and application of scientific and technological knowledge. The kinds of related scientific activities for the two main fields of science are enumerated below and more fully described later:

Natural Sciences	Human Sciences
Scientific data collection	General pupose data collection
Scientific information services	Scientific information services
Technical feasibility studies	Socio-economic feasibility studies
Education support	Education support
Museum services	Museum services
Testing and Standardization	Operations and Policy Studies

C. INTRAMURAL AND EXTRAMURAL PERFORMANCE

Where the S&T activities are managed and carried out primarily by federal government employees they are classified as intramural S&T. Even where major components of the project are provided by outside agencies, such as computer services, analytical services, provision of ship and airplane services, construction of laboratory, test or prototype equipment, if the planning, supervision, reporting, etc., are directly controlled by in-house personnel, then the activity is considered to be intramural. This also applies to S&T activities carried out by a department or agency on behalf of another federal department or agency on a cost recovery basis.

On the other hand if the management and conduct of an S&T activity is entrusted to a non-federal organization it is classified as being extramurally performed. The six extramural performance sectors used in surveying S&T expenditures by the federal government are: Canadian industry, Canadian universities, Canadian non-profit institutions, provincial and municipal governments, foreign performers, and other performers.

Intramural performance includes:

- scientific activities carried out by personnel of units assigned to the programs;

- the acquisition of land, buildings, machinery and equipment for scientific activities;

- the administration of scientific activities by program employees;

- the purchase of support services such as EDP and travel.

The intramural expenditures reported for scientific activities are those direct costs associated with scientific programs. These costs include that portion of a program's contribution to employee benefit plans (e.g., superannuation) which is applicable to the scientific manpower within the program. Non-program ("indirect") costs, such as the value of services provided by other departments without charge and accommodation provided by the reporting program are excluded.

Canadian industry - business and government enterprises including public utilities and government-owned firms. Industrial research institutes located at Canadian universities are considered to be in the university sector.

Canadian universities - including affiliated institutes owned, administered or staffed by universities.

Canadian non-profit institutions - charitable foundations, voluntary health organizations, scientific and professional societies, and other organizations not established to earn profits. Non-profit institutions primarily serving or controlled by another sector should be included in that sector (e.g. the Pulp and Paper Research Institute is in Canadian Industry).

Canadian provincial and municipal governments - departments and agencies of these governments. Government enterprises, such as provincial utilities are included in the Canadian industry sector, and hospitals in the Canadian non-profit institutions sector.

Foreign performers - all foreign governments, foreign companies (including foreign subsidiaries of Canadian firms), inter-

national organizations, non-resident foreign nationals and Canadians studying or teaching abroad.

Other performers - individuals or organizations not belonging to any of the above sectors. This includes provincial research councils and foundations.

D. CONTRACTS, GRANTS AND CONTRIBUTIONS

The federal government uses three methods of funding extramurally-performed S&T activities:

i) A contract is a legal agreement between two or more parties which will usually specify the nature and general objective of the S&T activity to be performed and the provision of the corresponding results according to an agreed schedule and cost.

ii) A grant is an unconditional payment to a recipient and the government does not necessarily receive any services (information, goods, etc.) as a direct result. It is to be noted, however, that there may be eligibility conditions which prospective recipients must meet.

iii) A contribution requires an agreement between the government and recipient specifying the terms and conditions under which funds will be paid to the recipient. In particular the payments are conditional on performance or achievement and the recipient's use of the funds provided is subject to audit.

In this report the term grants is used for both grants and contributions and data according to the method of funding extramural performance is collected only for R&D activities.

E. DEFINITIONS FOR THE NATURAL SCIENCES

Research and experimental development (R&D) - creative work undertaken on a systematic basis to increase the stock of scientific and technical knowledge or to discover new applications for existing knowlege. The central characteristic of R&D is an appreciable element of novelty and of uncertainty. The work is normally performed by, or under the supervision of, persons with postgraduate degrees in the natural sciences or engineering.

R&D is generally carried out by specialized R&D units. An R&D project however, may also involve the use of non-R&D facilities (e.g. testing grounds), the purchase or construction of specialized equipment and materials, and the assistance of other units. Costs of such items, attributable to the project, are considered R&D costs.

R&D units may also be engaged in non-R&D activities such as technical advisory services, testing, and construction of special equipment for other units. So far as is practical, the effort devoted to such operations is excluded from R&D.

On the other hand, R&D may be carried out by units normally engaged in other functions (e.g. a marine survey ship used for hydrological research, a geological survey team may be directed to work in a certain area in order to provide data for a geophysical research project). Such effort is part of an R&D project and again, so far as is practical, the costs are assigned to R&D expenditures.

Examples:

1. Routine autopsy on the causes of death is not research, but special investigation of a particular mortality in order to establish the side effects of certain treatments is research. Similarly, routine tests, such as blood and bacteriological tests, are not research, but a special program of blood tests in connection with the introduction of a new drug is applied research.

2. The keeping of daily records of temperature or of atmospheric pressure is data collection and not research. The investigation of new methods of measuring temperature is research as is the study and development of new systems and techniques for interpreting the data.

Research fellowships - awards to individuals for advances in research training and experience. Such payments are included as expenditures for R&D activities. Awards intended primarily to support the education of the recipients are reported as education support.

Scientific data collection - the gathering, processing, collating and analyzing of data on natural phenomena. These data are normally the results of surveys, routine laboratory analyses or compilations of operating records.

Data collected as part of an existing or proposed research project are costed against research. Similarly the costs of analyzing existing data as part of a research project are R&D costs, even when the data were originally collected for some other purpose. The development of new techniques for data collection is also considered a research activity.

Examples of scientific data collection are routine geological, hydrographic, oceanographic and topographic surveys; routine astronomical observations; maintenance of meteorological records; and wildlife and fisheries surveys.

Scientific information services - all work directed to recording, classifying, and disseminating scientific and technologi-

cal information. Included are the operations of scientific and technical libraries, S&T information and advisory services, the Patent Office, the publication of scientific journals and bibliographies, and the organizing of scientific conferences. Grants for the publication of scholarly works are also included.

General purpose information services or information services directed primarily towards the general public are excluded, as are teaching activities.

Testing and standardization - work directed towards the establishment of national and international standards for materials, devices, products and processes, the calibration of secondary standards and non-routine quality testing. The development of new measures for standards, or of new methods of measuring or testing, is R&D and is reported as such. Excluded is routine testing such as monitoring radioactivity levels or soil tests before construction.

Feasibility studies - technical investigations of proposed innovative engineering projects to provide necessary additional information for decisions on implementation. Excluded is routine work such as selection of road routes and bridge sites unless there are conditions which impose innovative solutions.

Educational support - grants to individuals or institutions intended to support the post-secondary education of students in technology and the natural sciences. The activity includes the support of foreign students in their studies of S&T at Canadian or foreign institutions. General purpose grants to educational institutions are excluded. Grants intended primarily to support the research of individuals at universities are either R&D grants or research fellowships.

Museum services - the collecting, cataloguing, and displaying of specimens of the natural world or of representations of natural phenomena. The scientific activities of natural history museums, zoological and botanical gardens, aquaria, planetaria and nature reserves are included.

The activity represents a systematic attempt to preserve and display items from the natural world; in some ways it could be considered an extension of scientific information services. Parks which are not primarily restricted reserves for certain fauna or flora are excluded.

Where practical, efforts of such institutions devoted to R&D or to other activities such as S&T information are excluded from museum services and assigned to those activities. The costs of providing entertainment and recreation to visitors are excluded (e.g. restaurants, children's gardens and nurseries).

Administration of extramural programs - the costs of identifiable units engaged in the administration of contracts and grants and contributions for scientific activities that are to be performed outside the federal government. These expenditures are broken down by the type of scientific activity supported, i.e., R&D or RSA.

F. DEFINITIONS FOR THE HUMAN SCIENCES

Research and experimental development (R&D) - creative work undertaken on a systematic basis towards the acquisition of new knowledge about man, his actions and his institutions, and the application of this knowledge in new ways.

R&D requires the acquisition of knowledge and not just information. New knowledge involves the integration of newly acquired information into existing hypotheses, the formulation and testing of new hypotheses or the re-evaluation of existing observations.

An R&D project generally has three characteristics:

- a substantial element of uncertainty, novelty and innovation;
- a well-defined project design;
- a report on the procedures and results of the project.

Examples:

1. Investigation of the factors determining regional variations in economic growth.
2. Studies of the effects of an urban development scheme on family group cohesiveness.
3. Investigation of the variables affecting the educational performance of children drawn from different social and ethnic groups.
4. Development of reward systems which take into account the differing motives, attitudes and perceptions of management and workers.

Both "research" and "development" are often used with different meanings in the government. For example, it is increasingly common to hear that a person is "researching" something (i.e. the person is looking for information about something). Similarly, there are many units with either research or development or both terms in their titles which are concerned

primarily with information gathering, speech writing, preparation of position papers or departmental organization. These are excluded from the scientific activity for R&D.

Research fellowships - awards to individuals for advanced research training and experience. Such payments are included as expenditures for R&D activities. Awards intended primarily to support the education of the recipients are reported as education support.

General purpose data collection - the routine gathering, processing, collating, analysis and publication of information on human phenomena using surveys, regular and special investigations and compilations of existing records. It excludes data collected primarily for internal administrative purposes (e.g. departmental personnel statistics) as well as the collection of data as part of an R&D project.

Data collected as part of an existing or proposed research project are costed against research. Similarly the costs of analyzing existing data as part of a research project are R&D costs, even when the data were originally collected for some other purpose. The development of new techniques for data collection is also considered a research activity.

Examples of general purpose data collection are the quinquennial censuses, and surveys of employment and production.

Scientific information services - the recording, classifying and disseminating activities of units concerned primarily with providing information for scientific activities in the social sciences and humanities.

Included are the operations of specialized libraries or national archives, the publication of scholarly journals and bibliographies, grants for the publication of scholarly works and the support of scientific and academic conferences.

General purpose information services or information services directed primarily towards the general public are excluded, as are teaching activities.

Economic and feasibility studies - investigations of the socio-economic characteristics and implications of specific situations. Such studies are generally limited to a specific problem and involve the application of established human science techniques and methodologies. Examples are a study of the viability of an iron foundry in a foreign country, or cost-benefit study of a proposed paper manufacturing centre in Manitoba.

Operations and policy studies - the analysis and assessment of departmental programs, policies and operations, the activities

of units concerned with the continuing analysis and monitoring of external phenomena (e.g. foreign economic statistics, defence and security information) as well as studies to provide an information base for policy development. The work is carried out by specialized units in some government departments, by consultants, by royal commissions and by task forces.

Education support - grants to individuals or institutions intended to support the post-secondary education of students in the social sciences and humanities. General purpose grants to educational institutions are excluded. The activity includes the support of foreign students in their studies of the social sciences at Canadian or foreign institutions.

Grants intended primarily to support the research of individuals at universities are either R&D grants or research fellowships.

Museum services - the collecting, cataloguing and displaying of specimens and representations relating to the history, social organization and creative efforts of man.

The activity represents a systematic attempt to preserve and display the works of man and to provide information on his works, history, and nature. The scientific activities of historical museums, archeological displays, and art galleries are included.

The costs of providing entertainment and recreation to visitors are excluded (e.g. restaurants, children's gardens and museums).

Administration of extramural programs - the costs of identifiable units engaged in the administration of contracts and grants and contributions for scientific activities that are to be performed outside the federal government. These expenditures are broken down by the type of scientific activity supported, i.e., R&D or RSA.

G. PERSONNEL RESOURCES

Data are also collected on the personnel resources devoted to or in support of intramurally-performed S&T activities. These resources included both scientific and technical personnel directly engaged in the S&T activities, such as scientific and engineering staff, technical staff, operational staff (e.g., field hands in agricultural research), and auxiliary staff such as secretaries, typists, administrative and financial staff. In regard to auxiliary staff there are two caveats:

i) where the S&T activities are a part of the program being reported only the auxiliary staff relevant to the S&T activities are reported on a pro rata basis,

ii) whenever financial and administrative support is provided from another program, that support is not allocated to the S&T resources for the program being reported.

Personnel resources are reported on an equivalent full-time basis. The unit used is person-years. Thus an employee working half-time on S&T activities is reported as 0.5 personyears.

Information on personnel appearing in this report is presented under the six occupational categories identified in the general classification system that applies to most public service positions:

1. Executive: refers only to the senior executive group. It is composed of positions, the incumbents of which are responsible for managing an agency and for providing advice on the development and conduct of government programs.

2. Scientific & Professional: groups engaged in the application of a comprehensive body of knowledge acquired through university graduation or groups in which membership in Canada is generally controlled by legal licensing bodies.

3. Administrative & Foreign Service: groups engaged in the planning, execution, conduct and control of programs serving the public interest, relations between Canada and other countries and the requirements of internal management in the Public Service of Canada.

4. Technical: groups engaged in the conduct of analytical, experimental and investigative duties in all the sciences and the performance of similar technical duties in which the requisite knowledge and skills are normally acquired through completion of secondary school education and specialised training.

5. Administrative Support: groups such as clerical and regulatory; communications; data processing; office equipment operation; secretarial, stenographic, typing, and telephone operation.

6. Operational: groups engaged in the performance of a craft or of unskilled work. It refers to groups such as correctional, general services, postal operations, and printing operations.

7. Military Personnel: members of the Canadian Forces engaged in scientific activities.